

FEDERAL RESERVE BANK OF MINNEAPOLIS

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2013 Update on the U.S. Earnings,  
Income, and Wealth Distributional Facts:  
A View from Macroeconomics

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*A description of the earnings, income, and wealth  
distributions in the United States in 2013 as measured  
by the Survey of Consumer Finances.*

# 2013 Update on the U.S. Earnings, Income, and Wealth Distributional Facts: A View from Macroeconomics\*

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Inequality and potential policy responses to increasing inequality in the United States have recently become a hotly debated topic among policymakers, academics, and pundits of all sorts. In this article, we abstain from entering the debate about policy responses but rather provide a description of inequality in the United States in 2013 as measured by the Survey of Consumer Finances (SCF) to inform the ongoing debate. Essentially, we report, organize, and discuss a snapshot of inequality in 2013 in the United States. We contrast this situation with that of past SCF surveys that go back to 1989 in order to shed some light on the evolution of inequality over the last quarter century.<sup>1</sup>

We focus on the inequality of earnings, income, and wealth, and discuss how this inequality is shaped by various characteristics such as age, education, employment status, and marital status. In particular, we focus on the concentration of income and wealth in the hands of the richest households. As part of this discussion, we also provide some new evidence on the contribution of inheritance to the persistence of concentration across generations. Subsequently, we investigate which sources of income and which types of assets are the main contributors to inequality. By focusing on the SCF, which does not include data on time allocation or consumption, we must of necessity ignore how unequally people live, which is a relevant consequence of inequality in income or wealth. Because the SCF is not a panel that tracks people over time, we are not able to discuss the lifetime features of inequality.

The SCF is a special survey conducted by the National Opinion Research Center at the University of Chicago and sponsored by the Federal Reserve with the cooperation of the Department of the Treasury. Its sample size of over 6,000 households is appreciably smaller than

that of other surveys such as the Current Population Survey (CPS), which has a sample size of 60,000 households. Despite its small sample size, the SCF is particularly careful to represent the upper tail of the wealth distribution by oversampling rich households. This unique sampling scheme makes the SCF particularly well suited for discussing the earnings, income, and wealth concentration at the top. For instance, in the 2013 sample, the net worth of the wealthiest household was over \$1.3 billion, and the household with the highest income earned more than \$150 million. In addition to providing ample data on household earnings, income, and wealth, the SCF includes detailed information on other features relevant to inequality, such as age, education, employment status, marital status, and household composition. This additional information about household characteristics is useful for shedding light on defining who the rich and the poor are. Finally, the SCF differs from administrative data in its unit of observation by focusing on households as a group of people who live together and share finances. Each survey of the SCF is accompanied by a data report discussing recent changes of U.S. family finances. The most recent report of this series is Bricker et al. (2014).

This piece builds on a series of articles that use the SCF to describe inequality in the United States (Díaz-Giménez, Quadrini, and Ríos-Rull 1997, Rodríguez et al. 2002, and Díaz-Giménez et al. 2011). To this end, we have redone the calculations for all previous SCF surveys using consistent definitions. Throughout the analysis, we put particular emphasis on consistency and comparability across existing articles.<sup>2</sup> The numbers we report in this article supersede those that we reported in the previous three articles.

The first part of our analysis provides an update on previous articles as well as an assessment of the evolution of the data for the past 25 years (1989–2013). We also provide a detailed discussion of changes across the three most recent surveys because they provide snapshots of the situation before, during, and after the Great Recession. The second part discusses additional and novel topics in this series, namely, the income and wealth concentration at the top and the sources of income and wealth inequality in terms of income sources and asset classes. Although we point out some connection to research that tries to model inequality, for the most part we simply describe the data. We do so, however, with macroeconomists' eyes, and we have constructed the tables that we think form the background of heterogeneous agent models.

As a preview of our results, we find that earnings and wealth inequality has substantially increased over the past quarter century in the United States. In contrast, we find diverging trends between income and earnings inequality since the 1990s. While earnings inequality increased, income inequality has increased only slightly, if anything. Even at the top of the income distribution, we do not find a further concentration of income shares. Capital income and financial assets contribute substantially to income and wealth inequality but by far are not the main drivers. Labor and business income and houses and businesses are the main contributors to income and wealth inequality. Furthermore, when we scrutinize the direct link from wealth inequality to income inequality, we find that the link between wealth and income is weak. Although we can safely call a certain group of households the rich, the group comprising the poor is more elusive because many households are not simultaneously poor with respect to earnings, income, and wealth.

One of our key findings is that there is no trend toward more income inequality. We examine different inequality measures and find that the reason is a trend toward less inequality at the bottom of the income distribution. We document an increasing share of transfers in total income that could be one reason for a wedge between trends in earnings and income inequality.

## Survey of Consumer Finances Data

We use data from the SCF household survey. Since 1989 the SCF has been conducted as a triennial representative household survey of U.S. households. The survey provides detailed and comprehensive information on U.S. households' income and wealth situation along with rich demographic information. Income in the SCF always refers to the previous calendar year. We adjust all data for inflation using the Bureau of Labor Statistics (BLS) consumer price index for urban consumers (CPI-U-RS). All dollar values are given in 2013 U.S. dollars.

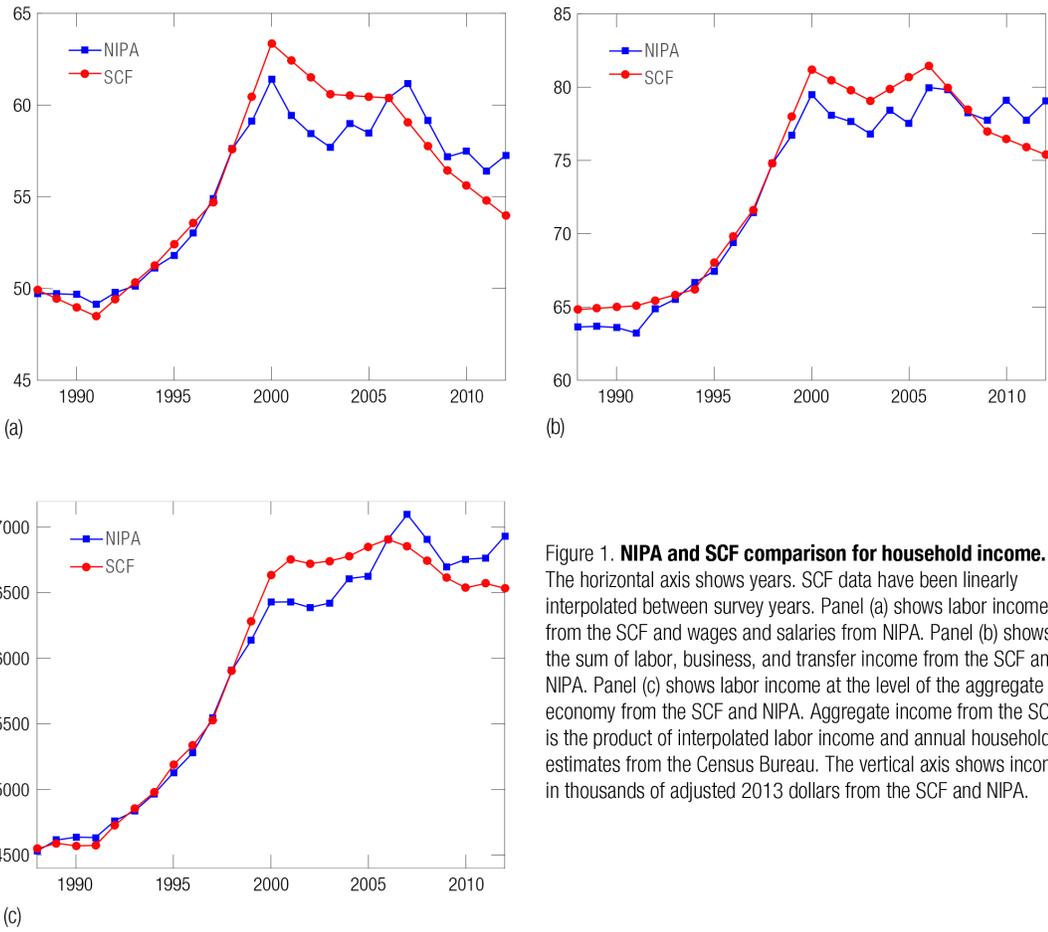
The SCF unit of observation is the household. Hence, information on earnings, income, and wealth is aggregated to the household level. This must be kept in mind when interpreting the data because larger households usually have more income, earnings, and wealth. The sampling scheme of the SCF is unique compared with other household surveys. It consists of a core sample of households that represent the majority of U.S. households in terms of household characteristics. In 2013, this sample consisted of 4,568 households. In addition, the SCF comprises a second sample of households that are interviewed based on information from tax data provided by the Statistics of Income program (SOI) of the Internal Revenue Service. Based on this tax data, likely high-wealth households are identified. This second sampling stage leads to an oversampling of rich households in the SCF in terms of household records. This so-called list sample consisted of 1,458 households in 2013.

The SCF provides sampling weights that are alleged to be representative of the universe of U.S. households as defined by the U.S. Census Bureau. Yet the definition of a household in the SCF is that of a primary economic unit that contains only persons in the household who are financially dependent on an economically dominant person or couple. The definition of the U.S. Census Bureau, however, is a group of people living together in a housing unit, which may include two families living together in one house. Although the two concepts most likely coincide for the vast majority of cases, the average SCF household is slightly smaller than households in the Census Bureau statistics. Aggregation of SCF data to the national level, even if in household terms, presents some challenges, especially in the presence of changes in the composition of households over time, and even after taking into account the considerable effort placed by the SCF in finding the high income and wealth households. Another issue of concern is the price deflator. The GDP deflator shows a much larger output growth than the CPI deflator, which is what we use. Consistently, when comparing national income and product accounts (NIPA) and SCF data, we construct NIPA data at the household level and deflate by the CPI.<sup>3</sup>

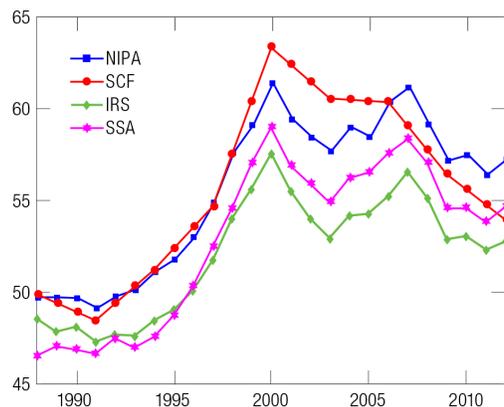
Figure 1 displays a comparison of NIPA and SCF per household variables throughout the sample. We see that the variables align fairly well for most of the sample, except for perhaps the period in the early 2000s when the SCF showed more labor income than NIPA and in the last survey in which the SCF displays lower values for all variables.

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**Figure 1. NIPA and SCF comparison for household income.** The horizontal axis shows years. SCF data have been linearly interpolated between survey years. Panel (a) shows labor income from the SCF and wages and salaries from NIPA. Panel (b) shows the sum of labor, business, and transfer income from the SCF and NIPA. Panel (c) shows labor income at the level of the aggregate economy from the SCF and NIPA. Aggregate income from the SCF is the product of interpolated labor income and annual household estimates from the Census Bureau. The vertical axis shows income in thousands of adjusted 2013 dollars from the SCF and NIPA.



**Figure 2. Household labor income.**

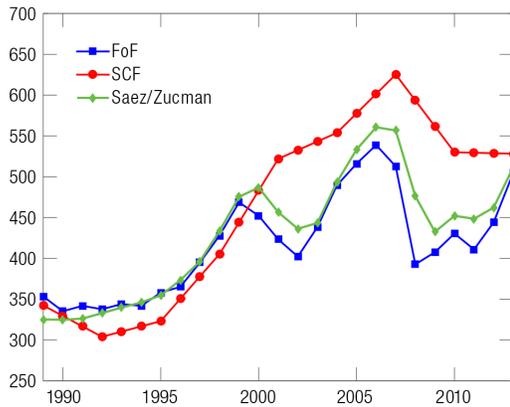


Figure 3. **Wealth from SCF and Flow of Funds.**

Figure 2 adds two additional sources of labor income to compare with the SCF and NIPA: the data underlying the national average wage index (AWI) reported by the Social Security Administration and data from the IRS tabulations from tax records.<sup>4</sup> We see that although the relative difference between NIPA is smaller than that in the SCF, the observations for 2013 show a similar relative difference between these additional sources and NIPA. We conclude that the SCF may have provided some underreporting of labor income in the last wave. Still, we think that the care put into sampling high income and wealth households justifies its use in analyzing the relative performance of different households.

In Figure 3, we compare wealth from the SCF to net worth from the Flow of Funds Table B.100 for the household sector. We adjusted the Flow of Funds household sector to exclude nonprofit organizations following the approach in Henriques and Hsu (2013). We also compare wealth from the SCF with data constructed by Saez and Zucman (2014) from Flow of Funds data. Using additional data sources and some assumptions, they exclude nonprofit organizations, consumer durables, and unfunded defined benefit pensions. Relative to the Flow of Funds, the SCF seems to miss some of the upswing in wealth that happened between 2010 and 2013. Our global assessment is that despite the small inconsistency with aggregate data, we consider the SCF microdata a very reliable source for the relative performance of all U.S. households including the very rich.

## Trends in Inequality and Inequality Measures

Economists use a range of different statistics to describe the degree of inequality in a distribution. In this paper, we focus mainly on the Gini coefficient, the coefficient of variation, and the variance of logarithms as the three most widely used statistics to measure inequality in economics.

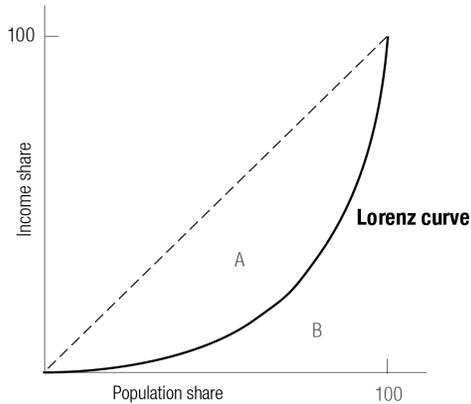


Figure 4. **Example of Lorenz curve for income.**

### *Gini Coefficient*

The Gini index is constructed based on the Lorenz curve. Figure 4 provides a graphic example of a Lorenz curve for income. The Lorenz curve plots the fraction of the population, sorted in increasing order of income, against the income share going to this part of the population. The straight line in the figure corresponds to a line of perfect equality, meaning that  $X$  percent of the population receive  $X$  percent of income. Except in this extreme case, the Lorenz curve is below the straight line. The Gini index is a summary measure of the distance from the Lorenz curve to the line of perfect equality. It is the area labeled  $A$  in the figure divided by the area  $A+B$ . The Gini index is therefore typically bounded between 0 and 1, where zero would be perfect equality and 1 complete inequality, meaning that one household gets all the income.<sup>5</sup>

One important thing to note is that different distributions of income can lead to the same Gini index, and the different distributions might also be associated with different notions of inequality. Consequently, we want to understand which changes in the distribution most affect the Gini index. It can be shown that the Gini index can be mathematically represented as

$$G = \frac{1}{2\bar{y}} \frac{1}{N^2} \sum_{i=1}^N \sum_{j=1}^N |y_i - y_j|,$$

where  $y_i$  is, for example, the income of household  $i$ ,  $\bar{y}$  is mean income ( $\bar{y} = \frac{1}{N} \sum_{i=1}^N y_i$ ),

and  $N$  is the number of households in the sample. Intuitively, it can be seen that the Gini index emphasizes differences in the distribution where most of the observations lie, which is typically the middle of the distribution.

### ***Coefficient of Variation***

The coefficient of variation is related to the general class of inequality measures from the generalized entropy index. The generalized entropy index for parameter  $\alpha$  is

$$G(\alpha) = \frac{1}{\alpha(\alpha - 1)} \sum_{i=1}^N \left( \frac{y_i}{\bar{y}} \right)^\alpha - 1,$$

and the parameter  $\alpha$  measures the sensitivity of the index to inequality in different parts of the distribution. The larger parameter  $\alpha$ , the more sensitive the index becomes to the tails of the distribution. Typical values for  $\alpha$  are  $-1$ ,  $0$ ,  $1$ , and  $2$ . It turns out that for  $\alpha = 2$ , the generalized entropy index is one-half times the coefficient of variation squared. Intuitively, the coefficient of variation squares the distance of observations to the mean. Given that income in most cases is positive but the distribution has a long right tail, it is an inequality measure that is sensitive to the top of the distribution.

### ***Variance of Logarithms***

The variance of logarithms is defined as

$$VL = \frac{1}{N} \sum_{i=1}^N \left( \log(y_i) - \overline{\log(y)} \right)^2,$$

where  $\overline{\log(y)} = \frac{1}{N} \sum_{i=1}^N \log(y_i)$  denotes the mean of log income. This measure has the

undesirable property that it cannot handle negative values. In the data, we observe negative values for earnings, income, and wealth. In the actual computation, these observations are discarded, arbitrarily affecting this measure of inequality. We include it in our discussion because it puts particular emphasis on the bottom of the distribution: the shape of the log function observations close to zero are amplified in their distance to the mean. The variance of logarithms is therefore usually said to be an inequality measure that is sensitive to the bottom of the distribution, especially when there are no negative values.

### ***Discussion***

When we discuss changes in inequality over time, we ignore the variance of logarithms arising from the censoring of zero and negative values, which have varying importance, and we focus instead on the Gini index and the coefficient of variation. In several cases, we will find that the Gini index and the coefficient of variation point in different directions with respect to changes in inequality. We will see that the Gini index almost always points toward increasing inequality, whereas the coefficient of variation indicates regularly decreasing inequality. The two inequality measures put weight differently across the distribution, thereby providing additional information about how the shape of the distributions changed. Consider the dis-

tribution of income in 1989 versus 2013. Table 1 shows the income growth rates of the main percentiles. As clearly shown, the pattern is U-shaped, indicating that income grew most for the lowest and highest groups.

Table 1

**Growth rates of main percentiles**

	1%	5%	10%	25%	50%	75%	90%	95%	99%	Mean
2013/1989	148.3	34.5	19.3	7.6	-1.0	5.5	11.2	18.5	44.2	13.2

The Gini index increased from 0.55 to 0.58, whereas the coefficient of variation decreased from 4.61 to 4.19. The Lorenz curves are shown in Figure 5, and they intersect: by 2013 the bottom of the distribution had moved closer to the middle, so the middle received a larger share of total income and the top did the opposite. For the coefficient of variation, two countervailing forces were at work: there was less inequality at the bottom and more inequality at the top. The excess growth at the bottom led the coefficient of variation to fall. Looking at the distribution, we see that the middle became more spread out.

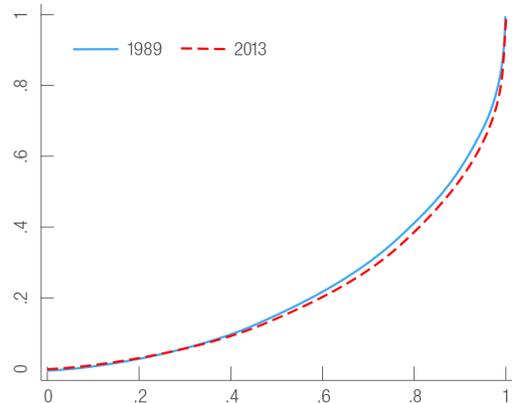


Figure 5. Lorenz curves of income in 1989 and 2013.

## The Distributions of Earnings, Income, and Wealth

We now describe how unequally distributed earnings, income, and wealth are by sorting households by each variable and then reporting their values for different groups in the population. *Earnings* means the rewards to all forms of labor including entrepreneurial labor; *income* includes earnings plus capital income plus government transfers; and *wealth* means the value of all assets net of debt.<sup>6</sup> Importantly, we count income withdrawn from retirement accounts, that is, retirees' supplementary income that decreases assets as transfer income. We construct the sum of income components as our preferred measure for total income, in line with other

studies (Johnson and Moore 2005, 2008). This measure should be more reliable because single income components should be more easily and more precisely determined than total income from all sources. Moreover, if we used total income from all sources, any decomposition of income into different income sources would always have a residual that would be hard to interpret.<sup>7</sup> Finally, this measure is also consistent with that used in earlier articles of this series. Unless noted otherwise, all variables refer to the household, which is our main unit of observation. A *household* is a single person or a couple who lives or does not live with other persons who are financially dependent on the financially dominant individual or couple.<sup>8</sup>

## A Description of the Distributions

### The Histograms

In Figure 6 we plot the *histogram* of the 2013 SCF income distribution (and of its smoothed *kernel density estimates*). We have truncated both tails of the sample at plus 5 times and minus 0.5 times the average household income (\$86,407). This truncation cuts out slightly less than 2 percent of the top households, and a few households form the bottom tail of the income distribution.

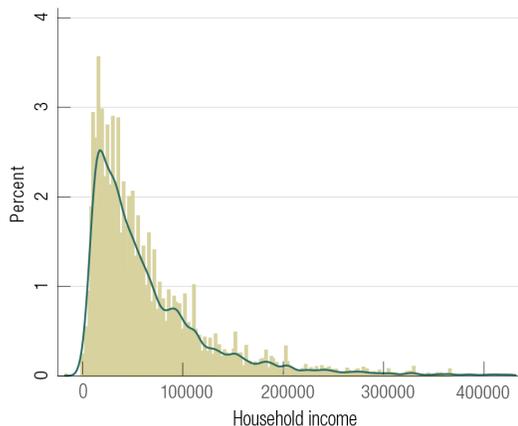


Figure 6. **Histogram of the 2013 income distribution (2013 USD).**

The main features of the income distribution are immediately apparent with a glance at the histogram: income is highly dispersed and skewed to the right, with a very thin and long right tail, and there is a large accumulation of mass in a relatively small range of values. For instance, the income of 50 percent of the households ranges between \$24,300 and \$89,900.

Qualitatively, the histograms of the earnings and wealth distributions are similar; we have chosen to omit them for the sake of brevity.

### The Quantiles

In Table 2 we report the main *quantiles* (thresholds that separate those with less from those with more) of the earnings, income, and wealth distributions of households. The first four columns describe the bottom tails of the distributions. The middle five columns describe the quintiles and the median. The last four columns describe the top tails of the distributions. We repeat this organization throughout the article.

Table 2

#### Quantiles of the 2013 earnings, income, and wealth distributions

	0	1	5	10	20	40	50	60	80	90	95	99	100
Earnings	-962.1	0	0	0	0	21.3	32.6	46.7	89.3	134.9	194.2	568.3	137,458.4
Income	-247.5	4.3	10.1	13.5	20.3	36.5	46.7	59.9	102.0	155.2	232.3	689.9	156,126.2
Wealth	-227,019.0	-78.9	-18.5	-2.0	4.3	38.2	81.4	147.6	427.8	941.0	1,871.6	7,880.4	1,324,417.5

Note: Values are 2013 thousands of dollars.

A quick glance at Table 2 reveals the sheer size of the ranges: there are incomes above \$150 million and net worth levels above \$1.3 billion, showing how the SCF is highly successful in ferreting out the very income-rich and wealthy. On the other end, we see the large sizes of the negative values, especially those of earnings. The negative values for earnings arise by construction only because of negative business income, whereas those for income also arise from negative capital income. As we will see later, negative capital income accounts for slightly more of negative income than negative business income.

The second feature that stands out is the large number of households with zero earnings. Most of these households are headed by retirees, who make up approximately 21 percent of the sample. Most of the remaining households with zero earnings—5.6 percent—consist of households headed by disabled individuals who are unlikely to work again.

The “typical” U.S. household is better described by the median rather than by the mean. Median earnings in 2013 are \$32,600 if we consider all households and \$44,600 if we consider only households headed by someone age 65 or younger, median income is \$46,700, and median wealth is \$81,400.

Readers can use Table 2 to identify their relative position along the various distributions. For instance, someone whose household income is \$60,000 would be slightly above the 60th percentile of the income distribution. But it takes a yearly income of about \$690,000 to be in the often-cited highest 1 percent of the income distribution.

### Concentration and Skewness

Next, we use a set of statistics to describe to what extent earnings, income, and wealth are concentrated in the hands of a few households. Sometimes we also refer to inequality to describe the same idea. Since words are oftentimes elusive and suggestive, we try to let the statistics speak and convey the information they carry about the earnings, income, and wealth distribution.

In the top half of Table 3, we report our chosen statistics to describe the concentration of

earnings, income, and wealth (coefficients of variation, variances of the logs, and Gini indexes). All three statistics confirm that wealth is the most concentrated of the three variables. The ranking between earnings and income is more ambiguous: the coefficient of variation of earnings is smaller than for income, but the variance of the logs and the Gini index are bigger for earnings. We think that it is the peculiarities of the income and earnings distribution that account for their ambiguous ranking. At the bottom, there is a large share of households with zero earnings, whereas the number of households with zero income is negligible (because of transfers such as social security, unemployment insurance, disability payments, and withdrawals from retirement accounts). At the top, income is more concentrated than earnings, mostly because of the role played by business income.

Table 3

**Concentration and skewness of the distributions**

	Earnings	Income	Wealth
Coefficient of variation	3.69	4.19	6.81
Variance of logs	1.50	0.99	4.80
Gini indexes	0.67	0.58	0.85
Location of mean	70	74	83
99–50 ratio	17.46	14.78	96.81
90–50 ratio	4.15	3.33	11.56
Mean-to-median ratio	1.96	1.85	6.49
50–30 ratio	3.21	1.64	5.50

The statistics reflect this situation: the variance of logs and the Gini index put more weight on the bottom and the middle of the distribution, yielding a higher measure of inequality for earnings than for income, whereas the coefficient of variation puts relatively the most weight on the tails, generating a higher measure of inequality for income. Transfers and capital income move some households from the lower part of the earnings distribution toward the middle of the income distribution, reducing income concentration. Capital income also moves some households that are in the middle of the earnings distribution into the top of the income distribution, thus increasing income concentration.

The second half of Table 3 reports various measures of *skewness* (or asymmetry of the distributions): the locations of the mean and the ratios between various values to the median (the 99th, the 90th, the mean, and the [inverse of the] 30th). Consistent with a long, thin right tail, all measures show that the distributions of earnings, income, and wealth are clearly skewed to the right, with wealth being the most skewed. Notice that although the mean value of income is located at a higher percentile than for earnings, for the other ratios, income displays a lower measure of inequality than earnings, reinforcing the notion that the inequality of income is coming from the top 1 percent, where there is a lot of business income, whereas that of earnings is at the bottom, where a lot of households have zero values.

### *Concentration and Skewness Decomposition*

To further investigate what drives inequality given the previous discussion, we report in Table 4 the various measures of concentration and skewness for the whole sample and for four sub-samples. Once we drop the top 1 percent of the sample, we clearly see how earnings inequality exceeds income inequality, confirming the high weight of the right tail in the coefficient of variation. Dropping the top 10 percent further confirms this finding. Note the very large contribution to all indexes of these top groups.

Table 4  
**Concentration and skewness decomposition**

	Whole sample			Without top 1%			Without top 10%			Without bottom 20%			Only ages 20–65		
	E	I	W	E	I	W	E	I	W	E	I	W	E	I	W
Coefficient of variation	3.69	4.19	6.81	1.31	1.11	2.48	1.00	0.70	2.38	3.27	3.84	6.02	3.29	4.06	7.31
Variance of logs	1.50	0.99	4.80	1.38	0.89	4.55	1.16	0.66	3.77	1.50	0.61	2.98	1.27	0.99	4.87
Gini indexes	0.67	0.58	0.85	0.61	0.49	0.79	0.55	0.39	0.71	0.58	0.52	0.80	0.60	0.56	0.87
Location of mean	70	74	83	65	67	77	58	60	67	71	76	83	70	73	83
99–50 ratio	17.46	14.78	96.81	10.32	9.15	55.25	4.76	3.65	14.48	14.16	13.25	59.84	13.03	13.6	129.40
90–50 ratio	1.96	1.85	6.49	3.97	3.28	10.72	3.38	2.56	7.70	3.26	2.99	7.74	3.27	3.18	14.84
Mean-to-median ratio	4.15	3.33	11.56	1.61	1.53	4.34	1.33	1.24	2.50	1.71	1.75	4.5	1.68	1.79	8.14
50–30 ratio	3.21	1.64	5.50	3.33	1.62	5.53	4.43	1.62	5.54	1.84	1.47	2.74	1.93	1.66	5.50

Dropping the bottom 20 percent of each of the distributions reduces the Gini index for earnings by quite a bit, but not the variance of the logs because this measure had already excluded those with nonpositive earnings. The income measures do go down quite a bit, but the wealth measures do not, which reminds us of how concentrated the latter measures are.

Interestingly, inequality among those in the working-age category has the same type of indicators as for the population as a whole. Life-cycle features, while important, do not change the picture of inequality that we have.

Except for earnings, we see that the measures of skewness are all relatively unchanged when we look at subsets of the population. When we drop the bottom 20 percent of the households, the 90–50 ratio becomes much larger and the 50–30 ratio much smaller, reflecting the fact that the bottom 20 percent of earners have zero or negative values.

### *The Effect of Household Size*

A household of several persons who are active in the labor market will have on average more earnings and income, and in the end more wealth, than if the household were to split into single individual households. If households of different sizes are at different locations of the earnings, income, or wealth distribution, looking at households may give different measures of inequality than if we took household size into account. To explore this issue, Table 5 reports the concentration and skewness measures using data per household and per adult equivalent using Organisation for Economic Co-operation

and Development (OECD) equivalence scales.<sup>9</sup> Skewness and concentration measures change, but not by much.

Table 5  
**Concentration and skewness of the distributions**

		Earnings	Income	Wealth
Coefficient of variation	per household	3.69	4.19	6.81
	per adult	4.04	4.37	7.09
Variance of logs	per household	1.50	0.99	4.80
	per adult	1.44	0.94	4.89
Gini indexes	per household	0.67	0.58	0.85
	per adult	0.66	0.56	0.85
Location of mean	per household	70	74	83
	per adult	69	74	83
99–50 ratio	per household	17.46	14.78	96.81
	per adult	15.51	13.11	98.27
90–50 ratio	per household	4.15	3.33	11.56
	per adult	4.02	3.15	12.13
Mean-to-median ratio	per household	1.96	1.85	6.49
	per adult	1.96	1.78	6.65
50–30 ratio	per household	3.21	1.64	5.50
	per adult	3.31	1.66	5.99

### ***The Poor and the Rich along Earnings, Income, and Wealth***

Being rich can mean several things. A household can have a lot of earnings and be earnings-rich, can have a lot of income and be income-rich, and can have a lot of wealth and be wealth-rich. Importantly, a household need not be rich along all three dimensions. Unlike tax data, the SCF observes the three dimensions jointly and can elicit whether there are such groups as *the rich* or *the poor*. For our discussion, throughout we will distinguish between the poor and the rich separately in terms of earnings, income, and wealth, displaying the main facts for the earnings, income, and wealth distributions in Tables 6, 7, and 8. In those tables, we rank households according to their earnings, income, and wealth, and we report the main economic and demographic characteristics of the households that belong to the various groups of the three distributions. When we sort households according to their earnings, many households have identical earnings observations. In these cases, we use income as a second dimension income for sorting households that have identical earnings.<sup>10</sup> To keep the language simple, we call the households in the bottom (top) 1 percent of the distributions *the poorest* (*the richest*) and those in the bottom (top) quintile *the poor* (*the rich*). We focus on these groups because one of the hardest tasks that any theory of inequality faces is to account for both tails of the distributions simultaneously.

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Table 6  
Earnings partition of the 2013 sample

	Bottom (%)			Quintiles					Top (%)			All
	0-1	1-5	5-10	1st	2nd	3rd	4th	5th	90-95	95-99	99-100	
Averages (× 10 <sup>3</sup> 2013 USD)												
Earnings	-5.8	0.0	0.0	-0.3	9.6	33.3	64.5	212.4	158.8	293.4	1203.2	63.9
Income	85.9	9.8	15.1	26.0	39.2	43.3	74.6	249.0	173.5	332.2	1592.7	86.4
Wealth	1529.4	61.6	91.1	225.3	338.4	191.8	258.2	1627.4	965.2	2461.4	12182.0	528.2
Portfolio shares (% of wealth)												
Housing and cars	19.1	73.2	66.5	46.0	37.9	51.1	64.4	28.1	42.0	27.4	13.2	36.1
Business and nonfinancial	40.5	18.6	9.4	21.3	14.1	29.4	27.6	40.3	30.3	41.2	49.6	33.3
Financial assets	46.4	21.1	37.2	43.1	59.6	45.0	47.0	46.6	53.1	44.6	42.5	47.9
Collateralized debt	-5.4	-11.4	-12.7	-9.6	-11.0	-24.1	-37.2	-14.5	-24.6	-12.8	-4.9	-16.5
Uncollateralized debt	-0.7	-1.6	-0.5	-0.7	-0.6	-1.4	-1.7	-0.5	-0.8	-0.4	-0.3	-0.7
Shares of total sample (%)												
Earnings	-0.1	0.0	0.0	-0.1	3.0	10.4	20.2	66.5	12.4	18.4	18.8	100
Income	1.0	0.5	0.9	6.0	9.1	10.0	17.3	57.6	10.0	15.4	18.4	100
Wealth	2.9	0.5	0.9	8.5	12.8	7.3	9.8	61.6	9.1	18.6	23.1	100
Shares of total sample (%)												
Housing and cars	1.5	0.9	1.6	10.9	13.4	10.3	17.4	48	10.6	14.2	8.4	100
Business and nonfinancial	3.5	0.3	0.2	5.5	5.4	6.4	8.1	74.6	8.3	23.1	34.3	100
Financial assets	2.8	0.2	0.7	7.7	16.0	6.8	9.6	60.0	10.1	17.4	20.5	100
Collateralized debt	0.9	0.3	0.7	5.0	8.5	10.6	22.0	53.9	13.6	14.5	6.9	100
Uncollateralized debt	2.7	1.0	0.6	8.1	11.0	14.1	23.6	43.3	9.7	9.7	9.7	100
Income sources (%)												
Labor	1.0	0.0	0.0	0.2	20.8	70.6	81.1	68.5	83.8	72.6	44.3	62.5
Capital	62.5	-2.2	.4	11.7	11.3	4.8	2.6	9.3	4.1	6.5	19.2	8.0
Business	-8.7	0.0	0.0	-1.4	4.1	7.1	6.2	18.9	8.7	17.7	35.3	13.0
Transfer	41.7	92.4	88.3	83.8	55.3	14.8	7.6	2.5	2.3	2.3	1.1	14.3
Other	3.5	9.8	11.3	5.7	8.5	2.7	2.5	.8	1.1	0.9	0.2	2.3
Age (%)												
Under 31	12.6	9.2	5.2	5.4	24.3	19.6	14	4.5	2.0	2.1	.5	13.5
31-45	10.3	8.4	9.7	6.8	18.3	32.9	34.8	38.4	41.6	35.7	25.8	26.2
46-65	40.3	35.9	28.9	28.2	27.4	38.3	45.4	51.8	52.3	52.9	59.2	38.2
Over 65	36.7	46.4	56.2	59.6	29.9	9.2	5.8	5.3	4.1	9.3	14.6	22.0
Average (years)	56.9	62.3	64.9	66.3	50.5	45.2	45.9	48.0	48.0	50.1	53.3	51.2
Education (%)												
Dropouts	15	33.9	29.9	22.6	14.3	11.7	5	1.4	.7	.6	0	11
High school	32	39.3	38.9	41.5	31.7	37.2	31.1	15	13	8.9	2.8	31.3
Some college	11.6	12.8	15.9	17.3	24	21.3	19	13	11.2	7.9	5.6	18.9
College	23.6	12.7	12.4	14	21.2	23.5	32.2	40.6	44.9	38.5	38.4	26.3
Postgraduate	17.9	1.4	3	4.6	8.9	6.2	12.7	30.1	30.1	44.2	53.2	12.5
Employment status (%)												
Workers	17.3	4.4	5.2	5.1	48.4	73	80.3	78	79.6	67.7	45	56.9
Self-employed	20.2	1.5	0.9	1.9	10.0	10.9	9.3	16.2	13.8	26.7	48.8	9.7
Retired	38.9	49.8	52.2	63.2	26.3	6.5	5	3	1.9	3.1	5.9	20.8
Nonworkers	23.7	44.3	41.6	29.8	15.4	9.6	5.4	2.9	4.7	2.6	.2	12.6
Marital status (%)												
Married	37.6	7.2	17.6	29.2	43.2	52.1	72	89.2	90.9	94.8	84.6	57.2
Single with dependents	33.2	28.6	21.8	20.6	30	23	10.5	3.4	1.8	.9	4.4	17.5
Single without dependents	29.3	64.2	60.6	50.2	26.8	24.9	17.5	7.4	7.3	4.3	11	25.3
Family size	2.23	1.65	1.67	1.84	2.38	2.67	2.81	3.18	3.13	3.32	3.04	2.58
Marital status excluding retired widows												
Single with dependents	29.5	23.1	17.1	15.8	28.8	22.9	10.3	3.4	1.8	.9	4.4	16.3
Single without dependents	24.2	42.2	40.5	30	23.8	24.7	17.4	7.3	7.3	4.2	10.5	20.7

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Table 7  
Income partition of the 2013 sample

	Bottom (%)			Quintiles					Top (%)			All
	0-1	1-5	5-10	1st	2nd	3rd	4th	5th	90-95	95-99	99-100	
Averages (× 10 <sup>3</sup> 2013 USD)												
Earnings	0.6	2.3	3	4.4	16	33.8	62.6	202.6	153.6	274.5	1144	63.9
Income	2	8.1	11.8	13.1	28.3	47.1	78.4	265.1	186	356.4	1700.5	86.4
Wealth	135.4	66.5	53.7	73.2	107.3	171.5	340.2	1949	1158.9	3271.7	13795.5	528.2
Portfolio shares (% of wealth)												
Housing and cars	58.6	73.9	80.3	71.7	78.9	67.5	58.6	25.7	36.9	23.7	12.2	36.1
Business and nonfinancial	50.5	16.6	21.7	19.9	17.1	19.5	24.5	37.4	30.5	35.7	46.3	33.3
Financial assets	16.7	33.4	20.9	31.0	33.7	46.8	48.5	49.3	53.1	50.4	45.9	47.9
Collateralized debt	-25.3	-22.5	-21.5	-21.4	-28.2	-32.1	-30.3	-11.9	-19.8	-9.4	-4.1	-16.5
Uncollateralized debt	-0.5	-1.5	-1.3	-1.2	-1.5	-1.7	-1.3	-0.5	-0.7	-0.3	-0.3	-0.7
Shares of total sample (%)												
Earnings	0	.1	.2	1.4	5	10.6	19.6	63.4	12	17.2	17.9	100
Income	0	.4	.7	3	6.5	10.9	18.1	61.4	10.8	16.5	19.7	100
Wealth	.3	.5	.5	2.8	4.1	6.5	12.9	73.8	11	24.8	26.1	100
Shares of total sample (%)												
Housing and cars	0.4	1.0	1.1	5.5	8.9	12.1	20.9	52.5	11.2	16.3	8.8	100
Business and nonfinancial	0.4	0.3	0.3	1.7	2.1	3.8	9.5	83	10.1	26.6	36.3	100
Financial assets	0.1	0.4	0.2	1.8	2.9	6.3	13.0	76.0	12.2	26.0	25.1	100
Collateralized debt	0.4	0.7	0.7	3.6	6.9	12.6	23.6	53.2	13.2	14.1	6.5	100
Uncollateralized debt	0.2	1.0	0.9	4.7	8.5	15.2	22.8	48.7	10.2	11.6	10.5	100
Income sources (%)												
Labor	44.1	27	23.4	30.9	53.4	67.2	75	60.4	75.8	61.1	38.3	62.5
Capital	-23.4	-4.6	-1.4	-0.5	0.6	1.3	1.7	12.3	4.5	10.6	24.9	8.0
Business	-14.7	1.7	2.8	3.1	3.8	5.2	5.5	18.1	7.6	17.9	32.7	13
Transfer	64.4	64	65.9	57.5	38.9	24.6	16.5	7	9.8	7.4	1.7	14.3
Other	29.6	11.9	9.3	8.9	3.2	1.7	1.3	2.3	2.3	2.9	2.4	2.3
Age (%)												
Under 31	37.7	28.6	22.0	22.6	18.7	13.9	8.9	3.6	2.8	0.9	0.0	13.5
31-45	18.1	12.7	11.9	15.9	25.2	27.3	29.8	33.0	29.0	29.7	24.2	26.2
46-65	41.4	32.5	31.8	30.9	28.3	37.8	45.2	48.9	55.9	48.6	54.5	38.2
Over 65	2.8	26.3	34.3	30.6	27.8	21.0	16.1	14.5	12.3	20.8	21.3	22.0
Average (years)	41.2	49.9	54.6	52.4	51.2	50.5	50.5	51.2	52.1	53.6	55.2	51.2
Education (%)												
Dropouts	21.2	24.6	30.4	24.3	17.1	8.5	3.9	1.1	.8	.3	0	11
High school	31.3	34.3	35.7	37.2	40	36.3	30.2	12.8	12.6	6.3	3.1	31.3
Some college	18.5	22.8	19.5	20.8	21.3	22.1	18.1	12.4	10.8	7	8.9	18.9
College	22.4	16.9	11.8	14.9	17.3	25.3	33.9	40.1	40.8	38.7	35.9	26.3
Postgraduate	6.6	1.4	2.6	2.8	4.3	7.7	13.9	33.7	35	47.7	52.1	12.5
Employment status (%)												
Workers	40.5	30.3	25.3	33	52.4	61.8	69.6	68	72.3	54.8	40.5	56.9
Self-employed	9.9	3.8	5	5.6	6.5	9.2	9.4	17.7	14.5	31.3	49	9.7
Retired	7.5	26.2	38.6	30	26.9	20.5	15.3	11.1	8.8	10.2	10.2	20.8
Nonworkers	42.2	39.8	31.1	31.4	14.3	8.6	5.7	3.2	4.4	3.7	.2	12.6
Marital status (%)												
Married	3.4	9.2	13	19.9	42.4	57.5	76.5	89.4	91.6	91.2	84	57.2
Single with dependents	46.3	37.9	34.8	33.2	27.6	15	8.7	3.1	2.6	1.7	4.3	17.5
Single without dependents	50.2	52.9	52.2	46.9	30	27.5	14.8	7.4	5.7	7.1	11.7	25.3
Family size	1.9	1.9	1.88	2.02	2.48	2.57	2.8	3.02	2.98	3.04	2.93	2.58
Marital status excluding retired widows												
Single with dependents	46.3	34.1	32.2	30.1	25.7	14.2	8.4	2.9	2.4	1.7	4.3	16.3
Single without dependents	47.6	44.9	32.6	35.8	22.2	24.5	13.9	6.8	5.6	6.5	11.1	20.7

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Table 8  
Wealth partition of the 2013 sample

	Bottom (%)			Quintiles					Top (%)			All
	0-1	1-5	5-10	1st	2nd	3rd	4th	5th	90-95	95-99	99-100	
Averages (× 10 <sup>3</sup> 2013 USD)												
Earnings	47.4	34.3	29.7	24.4	32.2	44.1	56.7	162.1	130.2	254.4	771.6	63.9
Income	60.6	41.4	36.2	32.2	39.6	55.1	74.9	230.2	170.2	348.7	1294.3	86.4
Wealth	-165.3	-40	-8.4	-17.8	17.1	85.0	258.5	2298.1	1278.2	3614.7	18733.9	528.2
Portfolio shares (% of wealth)												
Housing and cars	-56.5	-152.1	-411.5	-180.6	280.2	140.9	83.6	23.4	36.4	22.9	9.6	36.1
Business and nonfinancial	-7.0	-14.7	-39.6	-15.3	10.6	12.1	13.4	36.1	22.9	33.1	49.0	33.3
Financial assets	-8.2	-17.3	-65.5	-23.8	48.6	36.5	41.5	48.5	53.6	51.5	44.1	47.9
Collateralized debt	164.1	268.2	573.4	301.5	-227.8	-86.2	-36.9	-7.6	-12.6	-7.2	-2.3	-16.5
Uncollateralized debt	7.6	15.8	43.2	18.2	-11.6	-3.2	-1.5	-0.3	-0.4	-0.3	-0.3	-0.7
Shares of total sample (%)												
Earnings	0.7	2.1	2.3	7.6	10.1	13.8	17.7	50.7	10.2	15.9	12.1	100
Income	0.7	1.9	2.1	7.4	9.2	12.8	17.3	53.3	9.9	16.1	15.0	100
Wealth	-0.3	-0.3	-0.1	-0.7	0.6	3.2	9.8	87.0	12.1	27.4	35.5	100
Shares of total sample (%)												
Housing and cars	0.5	1.3	0.9	3.4	5.0	12.6	22.7	56.4	12.2	17.4	9.4	100
Business and nonfinancial	0.1	0.1	0.1	0.3	0.2	1.2	3.9	94.4	8.3	27.2	52.2	100
Financial assets	0.1	0.1	0.1	0.3	0.7	2.5	8.5	88.1	13.5	29.4	32.7	100
Collateralized debt	3.1	4.9	2.8	12.3	8.9	16.8	21.9	40.1	9.2	12.0	5.0	100
Uncollateralized debt	3.3	6.7	4.8	17.0	10.4	14.3	20.0	38.2	6.0	9.6	13.3	100
Income sources (%)												
Labor	73.6	80.3	79.4	73.2	78.3	77.2	70.8	52	66.7	51.8	28.9	62.5
Capital	0.1	0.1	0.0	0.1	0.1	0.5	1.6	14.4	4.6	12.8	32.0	8.0
Business	5.3	2.8	2.8	3.0	3.4	3.1	5.5	20.8	11.0	23.9	34.6	13.0
Transfers	8.4	13.0	12.8	17.6	15.4	17.6	19.9	11.0	14.2	9.3	4.0	14.3
Other	12.7	3.8	4.9	6.1	2.8	1.5	2.3	1.8	3.5	2.2	0.5	2.3
Age (%)												
Under 31	26.9	31.4	35.0	28.0	24.9	9.9	3.9	1.1	0.3	0.6	0.8	13.5
31-45	39.3	38.1	34.8	31.9	34.4	27.8	21.3	15.8	14.0	14.6	10.1	26.2
46-65	25.3	24.5	25.6	30.2	29	39.5	41.2	51.1	54.1	51.7	50.2	38.2
Over 65	8.5	6.1	4.7	9.9	11.6	22.8	33.6	31.9	31.5	33.2	38.9	22.0
Average (years)	41.9	39.4	39.1	42.9	43.9	52.3	57.6	59.0	59.8	59.4	61.6	51.2
Education (%)												
Dropouts	5.1	5.7	7.7	16.1	16.3	11.4	9.2	1.9	1.0	0.9	0.3	11.0
High school	8.1	20.4	30.6	33.6	38.4	37.4	31.6	15.4	12.2	5.9	7.4	31.3
Some college	18.3	24.1	29.3	23.3	21.7	18.5	18.2	12.9	17.4	7.3	12.4	18.9
College	48.1	36.1	28.3	21.1	19.7	24.0	28.9	37.8	39.3	36.1	33.2	26.3
Postgraduate	20.4	13.7	4.0	5.8	3.9	8.7	12.1	32.0	30.0	49.8	46.7	12.5
Employment status (%)												
Workers	60.5	72.2	68.5	58.7	65.9	59.9	53.3	46.7	51.6	33.7	17.4	56.9
Self-employed	7.5	5.3	5.4	5.4	5.8	6.3	8.8	22	19.6	39.3	59.5	9.7
Retired	8.5	6.3	6.1	10.2	11.7	22.7	32	27.3	26.3	24.5	20.0	20.8
Nonworkers	23.6	16.2	20.0	25.7	16.6	11.1	5.8	3.9	2.5	2.4	3.1	12.6
Marital status (%)												
Married	52.5	50.2	37	36.7	50.9	54.9	66.1	77.2	81.1	84	88.3	57.2
Single with dependents	23.1	24.9	36	31.7	24.6	16.7	8.5	6.0	5.4	3.4	1.1	17.5
Single without dependents	24.4	24.9	27	31.6	24.6	28.4	25.4	16.8	13.4	12.6	10.6	25.3
Family size	2.72	2.75	2.6	2.51	2.77	2.56	2.49	2.55	2.54	2.62	2.63	2.58
Marital status excluding retired widows												
Single with dependents	20	24.2	35.1	31	23.2	14.8	6.9	5.3	5.1	2.9	1.0	16.3
Single without dependents	24.4	24.9	25.9	28.9	21.1	22.6	18.2	12.5	10.2	10.0	8.9	20.7

## *The Poor*

*The earnings-poorest.* The earnings-poorest have negative earnings. This is because they incurred sizable business losses, which account for –9 percent of their income. The earnings-poorest are wealth-rich, owning about three times average wealth, which would put them in the top decile of the wealth distribution. Their average income is almost equal to the sample average, putting them in the fourth quintile of the income distribution. Most of their income comes from transfers and capital sources. The earnings-poorest are older than average (57 years in comparison to 51 years on average), and many of them are single (63 percent). The education of the earnings-poorest is about the same as the sample average. Many of the earnings-poorest are retired (39 percent). Clearly, this is not the group that fares the worst in life; more likely, it is a group in good shape but experiencing a bad year.

*The earnings-poor.* The group of the earnings-poor contains those with negative earnings and a large number with zero earnings, making their overall earnings still negative. They are a wealthy bunch—their average wealth would put them in the fourth wealth quintile—but a lot less so than the earnings-poorest. Most of their income comes from transfers (84 percent). The majority are retirees (more than 63 percent), with lower education and a bigger fraction of singles, mostly widows, than the population at large, as we expect from the elderly.

*The income-poorest.* The income-poorest have both positive income and earnings, and their wealth is around the median. They have both capital and business losses (–23 percent and –15 percent) and receive 64 percent from transfers and 44 percent from labor income. Unlike the earnings-poorest, the income-poorest are young (the average age is 41.2, and the share of individuals under age 31 in this group is almost three times the sample average). The income-poorest are less educated than the sample average, with 10 percentage points fewer college graduates and 10 percentage points more high school dropouts. In this group, many households are headed by nonworkers (42 percent, whereas the sample average is only 13 percent). Almost all (96 percent) of the income-poorest are single. Although this group contains some very poor households, it also includes households with sizable wealth and a bad draw in terms of business or capital income.

*The income-poor.* The average household income of the income-poor is \$13,100. Most of this income comes from transfers and labor (58 and 31 percent). The income-poor are either very young or very old (23 percent are under 31, and 31 percent are over 65; the sample averages are 14 and 22 percent). This group has many high school dropouts and very few college graduates (24 and 18 percent; the sample averages are 11 and 39 percent). Many of the households in this group are headed by either retirees or nonworkers (30 and 31 percent). Most of them are single, both with dependents and without (33 and 47 percent). More so than the income-poorest, the income-poor make up the group of households in bad shape. Most of the income-poor households have female household heads. On average, 28 percent of households are female-headed; among the income-poor, 54 percent of households are female-headed.

*The wealth-poorest.* The average net worth of the wealth-poorest is \$–165,300. But their income is approximately \$61,000. Most of their income comes from labor (74 percent). They

are about nine years younger than the average. A majority of the household heads have completed college (69 percent, whereas the sample average is 39 percent), and this group has very few high school dropouts (5 percent, which is half the sample average). About a third of their debt is from student loans, amounting to \$102,500, which is over 60 percent of their negative net worth position. Most of them are workers, but this group also has a relatively large share of nonworkers (61 and 24 percent; the sample averages are 57 and 13 percent, respectively). They are more educated and younger. Being younger than the average, they are also more frequently single.

*The wealth-poor.* The wealth-poor have negative wealth overall and much lower earnings and income than the wealth-poorest. Most of their income comes from labor (73 percent). The household heads are young (60 percent of them are under age 45), and many of them are single, both with dependents and without (32 and 32 percent). As a whole, the group is not very educated and includes a sizable number of nonworkers.

### *The Rich*

*The earnings-richest.* The earnings-richest are rich along all three dimensions. Their average earnings, income, and wealth are 19, 18, and 23 times the sample averages. Their share of business income is over twice the sample average, and they receive a trivial amount of transfers. Most of them belong to the 46–65 age group (60 percent), which are the prime years for working. Almost all of the household heads in this group (92 percent) have completed college. Many of them are self-employed (49 percent, which is 5 times the sample average), and most of them are married (85 percent).

*The earnings-rich.* The earnings-rich are still rich along all three dimensions, but appreciably less so than the earnings-richest. Their average earnings, income, and wealth are about 3 times the sample averages. They have almost no transfers and a larger share of business income than the average household. The household heads are prime-age workers, but on average they are about five years younger than the earnings-richest. A very large share of the household heads have completed college (71 percent).

*The income-richest.* The income-richest are very rich along all three dimensions, even more so than the earnings-richest. Their average earnings, income, and wealth are 18, 20, and 26 times the sample averages. Large shares of their income come from labor and business sources (38 and 33 percent). The household heads have a similar age composition as the earnings-richest. Their average age is 55, and 55 percent of them are between 46 and 65 years. Almost all of them have completed college (88 percent), many of them are self-employed (49 percent), and most of them are married (84 percent).

*The income-rich.* The income-rich are rich along all three dimensions, but their earnings and income are only about 3 times, and their wealth only about 4 times, the sample averages. When compared with the income-richest, more of their income comes from labor (60 percent) and less from capital and business sources (12 and 18 percent). Their average age is 51 years, which makes them on average four years younger than the income-richest. Most of the house-

hold heads have completed college (74 percent), they are mostly workers and self-employed (68 and 18 percent), and a very large share of them are married (77 percent).

*The wealth-richest.* The wealth-richest own extremely large wealth amounts (36 times the sample average) and relatively smaller earnings and income (12 and 15 times the sample average). Their income is almost evenly split between labor, capital, and business sources (29, 32, and 35 percent). They are quite old (the average age of the household heads is 62, and 39 percent of them are over 65). They are also highly educated, with 80 percent having completed college. A very large share of them are self-employed (60 percent, which is more than 6 times the sample average), and almost all of them are married (88 percent).

*The wealth-rich.* The wealth-rich are still rich along all three dimensions, but there is less of a gap between their wealth holdings and their earnings and income (4.4 to 2.5 and 2.7 times the sample averages). Business and capital income are still important income sources (21 and 14 percent), but the largest share of their income comes from labor, as compared with the wealth-richest (52 and 29 percent). The household heads are old (59 years on average), they have completed college (70 percent), many of them have retired (27 percent), and although most of them are married (77 percent), the share of singles without dependents is also sizable (17 percent).

## **Compensation**

For most households, labor income constitutes the single most important source of income, but labor income constitutes only a fraction of employee compensation. Today, non-wage benefits account for roughly 20 percent of compensation.<sup>11</sup> Pierce (2001) provides a detailed discussion of non-wage benefits based on data from the Employer Cost of Employee Compensation (ECEC) survey of the BLS and the resulting changes of considering compensation inequality rather than wage inequality.

Unfortunately, the SCF has no information on total compensation of employees. We therefore use data from the ECEC survey of the BLS to impute non-wage benefits to household earnings in the SCF. We impute health and retirement benefits to earnings based on 2007 ECEC data from Pierce (2010).<sup>12</sup> We refer the interested reader to Pierce (2010) regarding the details of the construction of these data series. We adjust the benefit shares from Pierce (2010) to account for the fact that they are expressed as a fraction of compensation rather than earnings. We sort households by earnings and impute the fraction of health and retirement benefits separately for each earnings percentile. We impute only if earnings are positive. We refer to the sum of earnings and benefits as compensation. Our imputation has several caveats. Earnings also include entrepreneurial income and is the sum of labor income of all household members. The ECEC survey is an employer survey, and information is only available at the level of the job, not the individual. We do not take information of benefit incidence in the SCF into account, but impute conditional averages for each earnings percentile. Although our imputation approach has several caveats, it should provide a first approximation of the resulting consequences of including benefits in the distribution of earnings. In our case, the ordering of households along the distribution remains almost unaffected due to missing individual level

data and only small differences in benefit shares in the upper part of the earnings distribution.

Table 9 shows measures of concentration and skewness for the earnings and compensation distribution equivalently to Table 3. On average, the compensation distribution relative to the earnings distribution shifts up. The strength of the shift is heterogeneous along the earnings distribution. Low earnings households have zero earnings and therefore no benefits. In the middle of the distribution, the benefit share in compensation rises quickly but decreases at the very top of the distribution. This pattern shows up strongest when looking at the 50–30 and 90–50 ratio in Table 9. For compensation, the 50–30 ratio increases relative to the earnings distribution, while the 99–50 ratio decreases and the 90–50 ratio remains almost unaffected. Overall, concentration of compensation and earnings is similar with a slight tendency that compensation shows a lower coefficient of variation and Gini index. The variance of logarithms increases with the caveat that zeros and negative earnings and compensation observations are discarded for this measure.

Table 9

**Concentration and skewness of the distributions**

	Earnings	Compensation
Coefficient of variation	3.69	3.64
Variance of logs	1.50	1.56
Gini indexes	0.67	0.66
Location of mean	70	70
99–50 ratio	17.46	17.12
90–50 ratio	4.15	4.17
Mean-to-median ratio	1.96	1.95
50–30 ratio	3.21	3.49

In Table 10, we look at the earnings partition from Table 6. We report averages and shares in the total sample for earnings and compensation. For averages, we see that they are shifted up for all households with positive earnings. The shift is strongest in the middle of the distribution. This can also be seen when looking at the shares of compensation in the total sample. Between the second quintile and the 95th percentile the shares increase, while at the top and the bottom the shares remain constant or decrease slightly. Overall, the effects are modest.

***Wealth, Assets, and Debt***

Do wealth portfolios vary across the distribution? Tables 6, 7, and 8 show that the main difference between the rich and the poor is that the households hold higher shares of their wealth in housing and cars, whereas rich households hold a larger share in business and financial assets. This is especially true in the wealth partition, where poor households have negative wealth, which switches the signs of portfolio shares. The bottom 10 percent of wealth households are underwater and their debt is mostly collateralized debt, perhaps due to the boom and bust in house prices over the 2000s. Debt holdings are a large size for all groups. Those with negative

Table 10

**Compensation and earnings**

	Bottom (%)			Quintiles					Top (%)			All
	0–1	1–5	5–10	1st	2nd	3rd	4th	5th	90–95	95–99	99–100	
Averages ( $\times 10^3$ 2013 USD)												
Earnings	–5.8	0.0	0.0	–0.3	9.6	33.3	64.5	212.4	158.8	293.4	1203.2	63.9
Compensation	–5.8	0.0	0.0	–0.3	10.6	39.0	76.2	247.2	186.7	338.8	1383.4	74.5
Shares of total sample (%)												
Earnings	–0.1	0.0	0.0	–0.1	3.0	10.4	20.2	66.5	12.4	18.4	18.8	100.0
Compensation	–0.1	0.0	0.0	–0.1	2.9	10.5	20.4	66.3	12.5	18.2	18.6	100.0

wealth barely hold 10 percent of all debt, whereas the rich hold a lot of debt—so much in fact that more than half of all debt is held by the top earnings quintile and more than two-fifths of all wealth by the top wealth quintile. It is only the top 1 percent of all partitions that have a portfolio that is clearly different from that of the population at large.

In the section that follows, we look at the finer partition of asset classes described in Figure 7 to compare the portfolios of the wealth-rich and wealth-poor in detail. The section after that looks at student loans, an item that has grown dramatically in recent years. Then we look at the relation between different wealth components and capital income to discuss the extent to which a uniform rate of return exists. Finally, the section entitled “Portfolio Composition and Prices” explores how changes in asset prices and shifts in the portfolio have affected the wealth distribution.

### *Portfolio Composition of the Wealth Partition*

Table 11 reports the portfolio shares in detail for the wealth partition. First, note that retirement accounts constitute the bulk of financial assets, whereas mortgages are the main part of debt, constituting 13 percent of all wealth. Retirement accounts are a roughly constant fraction of wealth throughout the wealth distribution, with the exception of the bottom 5 percent and the top 1 percent. Other financial assets such as stocks, mutual funds, bonds, and other managed investment holdings are highly skewed toward the top of the distribution. In particular, stocks are highly concentrated in the population, with only about 10 percent of households holding stocks directly. The bottom quintile holds a lot of debt in the form of installment loans. These holdings are small, however, compared with overall debt.

### *Student Loans*

Student loans, one of the items in installment debt, has grown considerably in the last few years, both in the amount of debt held by those who hold some debt of this type and in the number of households that have student loans. The left panel of Figure 8 shows mean education installment debt for all households age 35 and younger for all education groups and for those with at least some college over time. We see that the level of debt has tripled since 1989

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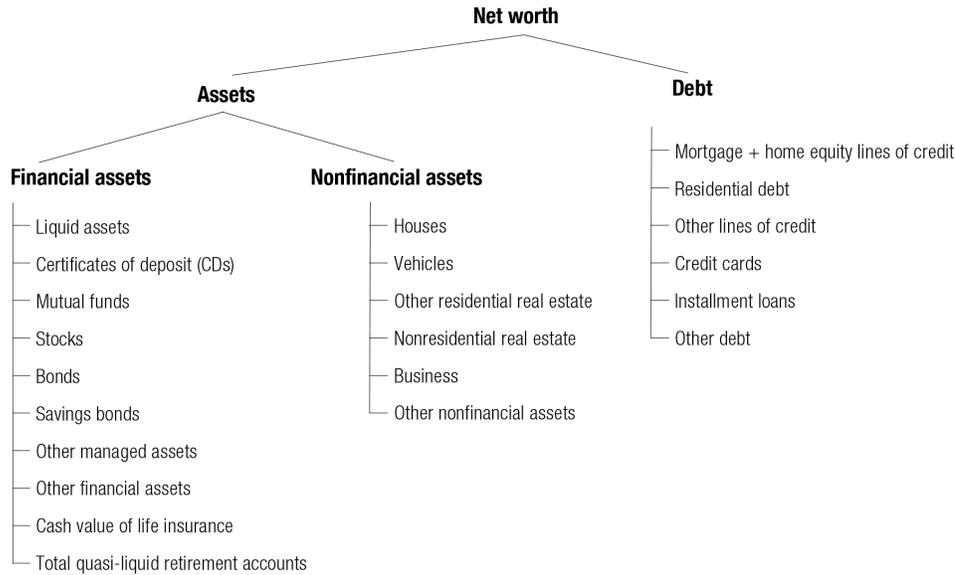


Figure 7. SCF household portfolio.

Table 11

Portfolio composition (Figure 7) of the wealth partition, 2013

	0-1	1-5	5-10	1st	2nd	3th	4th	5th	90-95	95-99	99-100	All
Liquid assets	2.8	4.8	22.9	8.1	17.0	10.2	7.4	5.9	6.5	7.0	4.6	6.4
CDs	0.0	0.6	1.7	0.5	0.6	1.0	1.6	0.9	1.5	0.7	0.5	0.9
Mutual funds	0.0	0.4	1.1	0.3	0.4	0.8	1.6	7.9	5.2	7.6	10.5	7.0
Stocks	0.0	0.9	2.0	0.7	1.5	1.1	1.9	8.2	5.6	9.4	9.7	7.4
Bonds	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.8	0.5	2.0	2.5	1.5
Saving bonds	0.0	0.1	0.6	0.2	0.3	0.4	0.2	0.1	0.2	0.1	0.0	0.1
Other managed assets	0.0	0.0	2.1	0.3	0.3	0.7	1.9	3.9	2.9	3.3	5.1	3.6
Cash value life insurance	0.1	1.3	2.2	1.1	4.9	1.9	1.7	1.2	1.4	1.0	1.1	1.3
Other financial assets	0.1	0.3	1.2	0.6	2.1	0.8	0.8	0.8	0.9	0.9	0.7	0.8
Retirement accounts	5.2	9.0	31.8	12.0	21.5	19.6	24.3	17.8	29.0	19.6	9.4	18.7
Houses	48.8	122.9	308.7	140.3	207.1	120.5	74.8	21.7	33.8	21.5	9.0	32.4
Vehicles	7.7	29.1	102.8	40.3	73.1	20.3	8.7	1.7	2.5	1.4	0.6	3.7
Other residential RE	1.4	11.8	33.0	10.0	5.5	6.7	6.8	8.0	9.0	8.6	7.3	7.9
Nonresidential RE	0.0	0.1	0.6	0.3	1.3	1.7	2.0	3.9	4.0	4.3	3.7	3.6
Business	5.2	2.3	3.9	4.3	2.2	2.6	4.0	23.3	9.0	19.5	36.9	20.8
Other nonfinancial assets	0.4	0.4	2.1	0.7	1.5	1.1	0.7	0.9	0.9	0.6	1.2	0.9
Mortgages + HELOCs	-66.5	-145.9	-333.1	-161.1	-178.4	-71.4	-30.7	-6.0	-10.0	-5.6	-1.5	-12.7
Residential debt	-0.4	-13.9	-36.0	-10.7	-3.6	-3.9	-2.4	-1.3	-1.9	-1.4	-0.8	-1.6
Other lines of credit	0.0	-0.4	-5.2	-0.8	-1.1	-0.2	-0.1	-0.1	0.0	-0.1	-0.2	-0.1
Credit cards	-7.4	-7.9	-32.8	-13.0	-9.3	-2.4	-1.1	-0.1	-0.2	0.0	0.0	-0.4
Installment loans	-97.3	-108.4	-204.4	-129.7	-45.7	-10.9	-3.9	-0.4	-0.6	-0.2	-0.1	-2.3
Other debt	-0.2	-7.5	-5.1	-4.4	-1.3	-0.6	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2

Note: We use the following abbreviations: *CDs* for certificates of deposit, *RE* for real estate, *HELOCs* for home equity lines of credit.

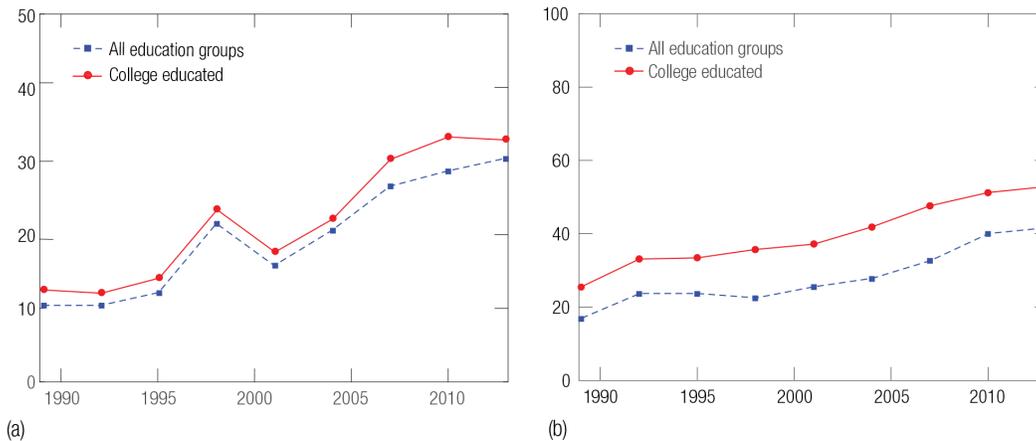


Figure 8. **Student loans for households with head under 35 years of age.** Panel (a) shows student loans ( $\times \$1,000$ ) for households with student loans; panel (b) shows share of households with student loans.

(from \$10,400 to \$30,500 for all households under 35 and from \$12,700 to \$33,100 for those with some college education). The right panel shows the percentage of households with student debt. The percentage has more than doubled in the same period (from 17 to 42 percent of all households under 35 and from 25 to 53 percent of those with some college education). As we will see later, although the well-educated saw the largest increase in earnings and income, the increase in debt is much larger than the increase in income.

### *Wealth as Source of Income*

The relation between wealth and income is not as simple as equal rates of returns across or within asset classes. Table 12 shows the correlation of various forms of capital income with different measures of household wealth.<sup>13</sup> We consider capital income excluding business income, with and without capital gains, and business income alone. These correlations never exceed 0.56, the highest being the correlation between capital income excluding capital gains and financial assets (wealth net of houses and businesses is almost the same variable as financial assets). The other correlations never exceed that level, partly because the return on housing goes mostly unmeasured and partly because the return on businesses can have large individual variability. Still, we consider the value of 0.56 to be quite low, given that it could be the rate of return for traded firms. When we use models of the aggregate economy, wealth enters as a factor of production. As such, it generates income for owners that is typically perfectly correlated. That the data indicate otherwise should be of concern.

### *Portfolio Composition and Prices*

Over the last 25 years, asset prices have oscillated wildly, as Figure 9 shows.<sup>14</sup> Stocks, as measured by a broad stock market index such as the S&P composite, are now three times more valuable than they were in 1989, despite the large drop at the beginning of the Great Reces-

Table 12

**Correlation of income and wealth: various components**

	Net wealth	Financial wealth	Wealth net of houses	Wealth net of business	Wealth net of houses and business
Capital income	0.32	0.37	0.31	0.37	0.37
Capital income (excl. capital gains)	0.50	0.56	0.50	0.55	0.56
Business income	0.51	0.30	0.51	0.34	0.34

sion. Housing prices stagnated during the nineties, had a dramatic increase up to the Great Recession and an equally dramatic loss after its peak, and experienced a partial rebound in the last few years. Unfortunately, there is no easy way to find the prices of the other assets in households' portfolios, especially business assets.

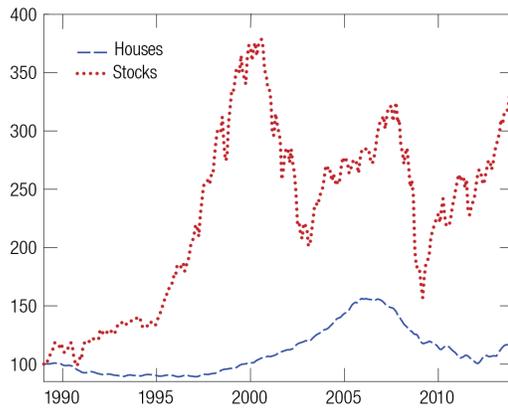


Figure 9. **Stock and house prices.** Inflation-adjusted S&P composite and Case-Shiller house price indexes (January 1989 = 100).

To examine which wealth groups were most affected by these price changes, we use three asset portfolios and follow their values over time. Such portfolios correspond to the asset composition of the top 1 percent of households, of the households in the second quintile (20 to 40 from the bottom), and of all households. We follow the value of these portfolios under different assumptions of the evolution of the prices of its components. In panel (a) of Figure 10, we show the evolution of values when only houses and stocks change prices. In panel (b), we pose the evolution of the values when other real estate follows the same prices as those in the Case-Shiller index, and where the prices of retirement accounts, mutual funds, and other nonfinancial assets follow the value of stocks. Finally, in panel (c), we also allow business assets prices to follow the prices of stocks.

As we can see, the values of all portfolios follow similar patterns when only house and stock prices are allowed to vary (except for the increase in the housing prices during the years up to the Great Recession, which increased the value of the portfolio of the second quintile). As

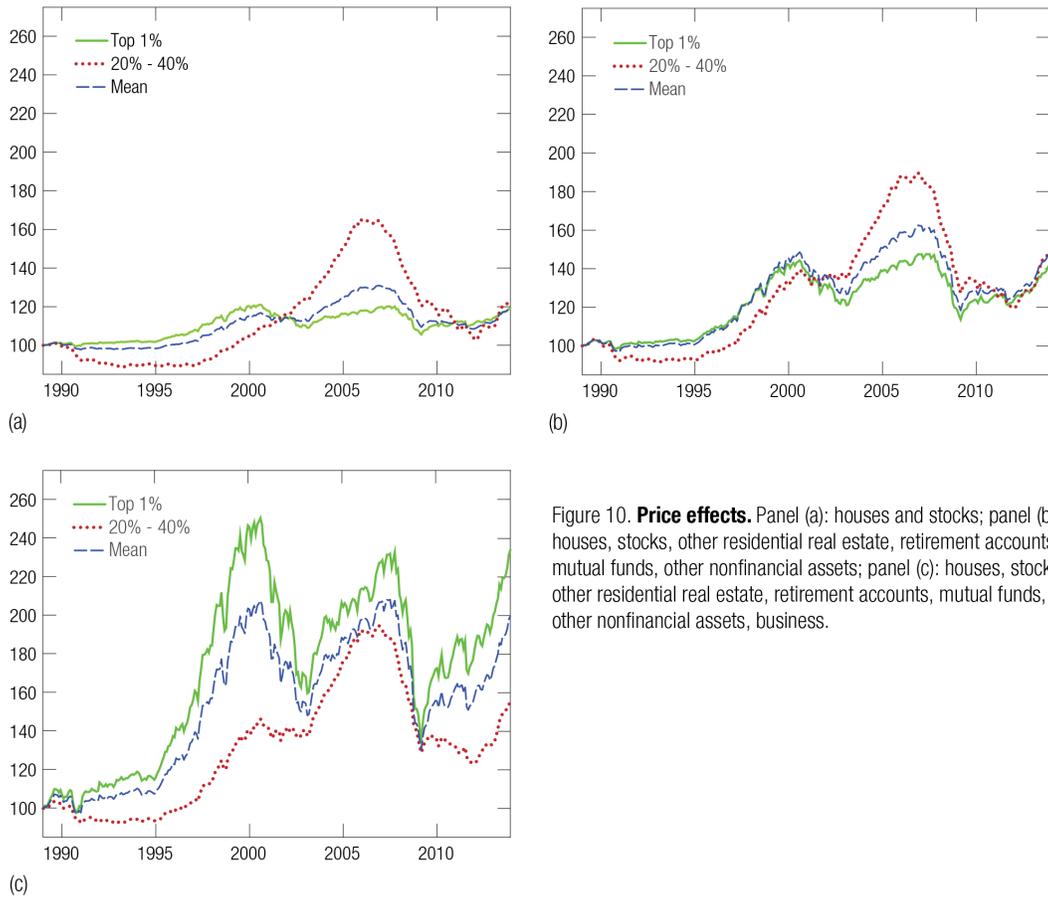


Figure 10. **Price effects.** Panel (a): houses and stocks; panel (b): houses, stocks, other residential real estate, retirement accounts, mutual funds, other nonfinancial assets; panel (c): houses, stocks, other residential real estate, retirement accounts, mutual funds, other nonfinancial assets, business.

we add price changes in more components, we see that overall the value of the portfolio of the richest people has gone up a lot more than that of the mean portfolio and in turn much more than that of the poorest quintile. The great divergence has occurred since the onset of the Great Recession. Unfortunately, without knowing when households acquired those assets, it is hard to draw any conclusions about who has benefited the most from the price changes.

### **Joint Distribution**

Perhaps the most attractive feature of the SCF is that we can simultaneously observe income and wealth, and we want to know how they covary. Table 13 shows the joint distribution of earnings and wealth by partitioning the population in earnings and wealth deciles and describing the average values of earnings, income, and wealth in each of the bins that result from intersecting both sets of deciles.<sup>15</sup> The *typical* household as described by the median of the joint earnings-wealth distribution is between the fifth and sixth decile. Table 14 shows how many households are in each of the 100 bins that result from such partitioning. Both variables are correlated; hence they move together, with most of the mass concentrated along the main

diagonal. Some qualifications are needed. A substantial fraction of households is in the top right corner. These are usually households with high wealth and little earnings, the retired households, or households with losses from their business. The lower left corner displays little mass. Most high-earnings households are also high-wealth households. The strongest concentration of households is in the 10-10 cell in the lower right corner. On closer inspection, the life cycle becomes apparent. The mass of households is shifted slightly to the lower left of the main diagonal, that is, the high-earnings households with comparatively less wealth.

To isolate the non-life cycle factors in the joint distribution of earnings and wealth, Tables 15 and 16 show the averages and histograms in each bin when we restrict the sample to households with heads in the 35–55 age group. Relative to the population at large, these groups have more earnings and less wealth. This distribution is almost symmetric along the upper-left to lower-right diagonal, but less so along the lower-left to upper-right diagonal.

### *The Poor and the Rich*

So far we have concentrated our attention on partitions of the data along the earnings, income, or wealth dimension. We have seen that the poorest earnings and income households as a whole have a lot of wealth, whereas the wealth-poorest households as a whole have a lot of earnings and income. On the other hand, the richest households along one dimension are usually rich along the other dimensions. To investigate the overlap of the different groups in detail, we determine the share of households that are among the three bottom and top groups in one dimension and among the three bottom or the three top groups along the other two dimensions. We collect this information in Table 17.

Looking at the earnings-poorest, we see that a large number, 47 percent of them, are also among the income-poorest, but also 15 percent of them are among the top 10 percent of the income distribution. Households that are not working or that had a bad year with their business might still have a lot of income from other sources. This idea is supported by looking at the wealth distribution: only slightly more than 10 percent of the earnings-poorest are among the bottom 10 percent of the wealth distribution, whereas almost a fourth of the earnings-poorest are among the top 10 percent of the wealth distribution, with even 3.5 percent being among the wealthiest households.

The income-poorest are earnings-poor the majority of the time, but they are not often among the wealth-poorest; about 20 percent of them are in the poorest 10 percent of the wealth distribution. Looking at the wealth-poorest, they are not heavily concentrated at the bottom of the earnings or income distribution. About 5 percent are in the bottom 10 percent of the earnings distribution, and slightly more than 15 percent are at the bottom of the income distribution. A few more are at the bottom of the income distribution, a natural implication of income including mostly earnings and capital income. Moreover, we find that 5 percent of the wealth-poorest are between the 90th and 95th percentile of the earnings distribution, and slightly more than 5 percent are in the top 10 percent of the income distribution, but no one is in the top 1 percent of the income distribution of the wealth-poorest. We can conclude that the poorest income or earning households are by and large different households from the poorest wealth households.

The situation is different at the top of the distribution. The income-richest are also among

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Table 13

**Joint distribution of earnings and wealth from the 2013 SCF: average values in thousands of dollars of earnings, income, and wealth in each bin**

Earnings decile		Wealth decile									
		1	2	3	4	5	6	7	8	9	10
1	E	0.0	0.0	-0.3	0.0	0.0	-0.3	-0.9	0.0	-1.8	-12.0
	I	11.9	11.8	12.4	12.6	11.4	15.6	19.5	15.9	38.4	200.7
	W	-23.1	0.8	7.6	25.1	57.2	114.4	197.5	312.9	639.2	4686.6
2	E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	I	29.2	24.6	26.5	28.2	32.8	31.4	34.0	32.2	38.0	38.6
	W	-36.0	0.8	10.3	27.8	59.5	114.1	189.7	318.5	617.6	1910.2
3	E	4.9	5.0	5.2	4.8	4.9	3.3	3.3	2.6	1.5	2.4
	I	14.7	13.5	17.1	23.8	22.5	31.7	44.2	68.1	70.6	152.2
	W	-31.4	1.0	8.3	27.1	59.2	113.0	198.5	327.1	628.5	2892.1
4	E	15.2	15.4	15.6	15.7	15.3	16.2	15.4	14.5	14.7	15.0
	I	27.2	19.9	19.9	26.3	26.3	28.7	38.2	40.9	51.5	94.2
	W	-26.8	1.1	8.2	24.4	58.7	106.0	200.8	316.3	597.3	2074.1
5	E	27.5	26.6	26.5	27.2	27.8	27.5	27.3	26.3	27.3	25.9
	I	31.5	29.0	30.1	32.1	33.6	36.2	46.5	44.8	61.1	140.8
	W	-26.7	1.6	8.9	23.7	56.8	102.6	191.0	318.1	689.3	2763.3
6	E	39.2	39.5	39.0	39.3	40.0	39.7	40.1	40.2	40.1	39.8
	I	42.4	41.2	43.0	42.4	43.7	46.0	48.5	58.8	63.9	143.9
	W	-33.8	1.3	9.9	24.3	60.3	112.2	195.1	317.3	627.5	4627.0
7	E	53.2	52.8	53.6	54.5	53.9	53.5	54.7	54.1	55.0	52.1
	I	55.8	54.5	55.6	57.8	56.5	60.8	66.9	63.9	72.7	132.6
	W	-35.4	1.5	9.5	25.5	55.9	111.0	195.7	321.9	592.0	2333.4
8	E	75.4	72.0	73.9	73.4	74.9	75.2	76.4	75.5	76.1	75.4
	I	77.6	72.1	75.5	76.0	80.3	79.7	84.9	82.1	94.0	154.6
	W	-56.6	1.9	10.0	25.1	58.7	109.8	191.3	315.7	627.2	2392.3
9	E	106.8	110.4	103.9	104.3	106.0	108.2	106.1	106.6	110.4	110.5
	I	108.3	110.4	104.5	107.0	109.4	110.5	110.1	114.6	120.7	167.0
	W	-43.5	1.0	10.4	27.2	62.6	114.2	192.5	327.3	634.1	2964.2
10	E	167.7	193.7	177.0	153.9	163.0	174.0	176.1	178.7	201.0	455.2
	I	168.6	199.4	177.1	164.0	166.8	175.9	180.2	187.7	211.4	573.7
	W	-292.0	0.5	9.4	26.4	61.7	115.1	188.3	345.7	661.1	5095.5

Table 14

**Joint distribution of earnings and wealth in the 2013 SCF: percentage of population in each bin**

Earnings decile	Wealth decile										Total
	1	2	3	4	5	6	7	8	9	10	
1	0.91	3.09	1.24	1.15	1.05	0.66	0.68	0.58	0.28	0.34	10.0
2	0.57	0.68	0.71	0.68	1.05	1.67	1.66	1.65	1.06	0.27	10.0
3	1.34	1.54	0.89	0.62	0.77	0.68	0.95	0.75	1.18	1.28	10.0
4	1.38	1.98	1.99	0.91	0.87	0.78	0.50	0.46	0.63	0.49	10.0
5	1.58	1.21	1.97	1.47	1.10	0.76	0.49	0.64	0.44	0.33	10.0
6	1.67	0.66	1.33	1.85	1.19	1.07	0.65	0.73	0.57	0.27	10.0
7	1.16	0.54	1.00	1.38	1.36	1.36	1.23	0.97	0.62	0.38	10.0
8	0.73	0.16	0.62	1.14	1.32	1.36	1.57	1.27	1.22	0.60	10.0
9	0.51	0.08	0.21	0.68	0.93	1.28	1.61	1.66	1.88	1.16	10.0
10	0.15	0.05	0.04	0.10	0.37	0.37	0.65	1.29	2.09	4.88	10.0
Total	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	100.0

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Table 15

**Joint distribution of earnings and wealth for households with head age 35–55 from the 2013 SCF: average values in thousands of dollars of earnings, income, and wealth in each bin**

Earnings decile		Wealth decile									
		1	2	3	4	5	6	7	8	9	10
1	E	1.0	0.5	-0.3	0.5	0.6	0.1	0.4	0.2	0.6	-10.1
	I	16.2	13.7	17.1	18.4	21.8	23.3	29.1	46.6	49.2	237.0
	W	-25.8	0.4	7.4	25.4	52.0	107.2	162.6	253.0	590.1	2406.5
2	E	12.3	13.1	13.9	13.3	12.6	15.2	12.2	14.9	12.6	10.5
	I	18.9	20.4	19.4	24.8	21.0	24.2	26.1	27.4	38.8	86.5
	W	-19.8	1.2	8.4	25.4	54.3	100.1	172.1	284.9	541.7	1158.1
3	E	27.1	25.3	25.8	26.0	26.6	25.4	24.3	25.6	27.5	25.0
	I	32.3	29.4	30.2	31.6	31.2	27.1	31.2	33.2	33.2	34.9
	W	-34.3	1.7	8.8	23.5	52.0	94.5	186.1	301.4	628.8	1581.2
4	E	36.8	37.1	37.8	36.7	37.1	36.8	36.6	36.7	33.8	34.1
	I	40.3	39.3	42.0	40.4	39.8	41.3	43.4	43.4	56.0	135.4
	W	-40.6	0.9	9.3	23.1	54.7	99.4	179.3	289.0	668.5	1224.2
5	E	48.6	47.8	47.4	47.3	48.1	48.0	48.8	48.9	48.1	47.8
	I	50.0	49.7	49.9	51.2	49.9	51.8	54.9	57.1	53.2	135.0
	W	-33.7	1.4	9.6	24.2	49.7	96.6	171.7	292.3	532.0	2576.3
6	E	60.9	58.9	59.0	62.0	63.1	62.2	61.9	62.4	60.8	61.9
	I	63.2	61.5	61.8	64.1	66.0	70.4	70.8	66.2	65.9	74.8
	W	-32.2	1.0	9.3	24.1	51.1	96.0	177.1	292.1	553.4	1650.6
7	E	83.1	75.7	80.5	80.2	81.4	80.4	81.8	79.4	80.5	79.1
	I	85.2	75.7	83.2	83.2	88.2	81.4	84.8	82.7	91.3	94.4
	W	-83.5	1.1	10.7	25.0	52.2	98.8	176.1	300.9	586.0	2211.9
8	E	99.0	113.8	106.2	103.0	102.6	102.0	102.4	103.2	103.6	102.8
	I	100.6	113.8	107.2	104.0	104.2	103.7	107.0	108.4	109.7	123.2
	W	-48.1	-0.8	10.7	25.3	53.1	98.8	175.8	308.2	568.3	2335.4
9	E	142.8	139.5	150.7	132.8	137.0	137.7	139.0	145.2	143.0	142.6
	I	144.4	140.2	150.8	134.0	137.2	141.7	140.8	148.9	153.6	169.5
	W	-41.9	2.9	9.5	28.1	57.7	95.8	173.3	312.6	589.8	1941.1
10	E	206.5	253.6	253.6	206.5	232.2	210.4	215.8	219.9	234.6	524.0
	I	206.5	253.6	253.6	206.6	256.4	210.5	219.9	241.2	240.8	592.3
	W	-26.9	2.3	9.3	34.4	60.6	102.9	174.1	331.2	610.9	4268.4

Table 16

**Joint distribution of earnings and wealth age 35–55 in the 2013 SCF: percentage of population in each bin**

Earnings decile		Wealth decile										Total
		1	2	3	4	5	6	7	8	9	10	
1	1.77	3.27	1.45	0.80	1.03	0.75	0.41	0.14	0.21	0.18	10.0	
2	1.27	2.77	2.23	1.01	1.06	0.79	0.19	0.22	0.35	0.11	10.0	
3	1.67	1.62	2.21	1.85	1.21	0.58	0.34	0.29	0.19	0.05	10.0	
4	1.62	0.86	1.44	1.93	1.35	1.17	0.58	0.77	0.16	0.13	10.0	
5	1.12	0.98	0.97	1.38	1.33	1.33	1.20	1.02	0.34	0.33	10.0	
6	1.00	0.31	0.65	1.21	1.60	1.72	1.36	1.39	0.62	0.13	10.0	
7	0.63	0.03	0.70	0.98	1.18	1.40	1.88	1.37	1.45	0.38	10.0	
8	0.45	0.08	0.23	0.60	0.61	1.17	2.36	2.05	1.82	0.63	10.0	
9	0.34	0.10	0.11	0.20	0.53	0.81	1.25	1.83	2.87	1.96	10.0	
10	0.11	0.01	0.02	0.03	0.12	0.28	0.42	0.92	2.00	6.10	10.0	
Total	10.0	10.0	10.0	10.0	0.10	10.0	10.0	10.0	10.0	0.10	100.0	

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Table 17  
**Joint distribution of the poor and the rich**

	Earnings						Income						Wealth					
	0-1	1-5	5-10	90-95	95-99	99+	0-1	1-5	5-10	90-95	95-99	99+	0-1	1-5	5-10	90-95	95-99	99+
Earnings	0-1						47.3	9.8	0.0	4.6	9.6	0.5	1.3	5.2	4.4	5.9	13.5	3.5
	1-5						0.0	54.3	45.7	0.0	0.0	0.0	0.4	2.8	5.0	0.9	0.1	0.0
	5-10						0.0	0.0	27.0	0.0	0.0	0.0	0.5	2.7	6.3	1.0	0.5	0.0
	90-95						0.0	0.0	0.0	58.7	4.8	0.1	1.0	0.7	1.0	17.4	9.1	1.1
	95-99						0.0	0.0	0.0	24.6	73.6	1.8	0.0	0.3	0.1	27.7	28.7	6.4
	99+						0.0	0.0	0.0	0.0	15.4	84.6	0.0	0.0	0.0	4.9	56.6	38.5
Income	0-1	47.4	0.0	0.0	0.0	0.0							4.9	8.3	13.8	0.2	1.4	0.3
	1-5	2.5	54.3	0.0	0.0	0.0							1.6	4.9	10.7	0.8	0.5	0.0
	5-10	0.0	36.6	27.0	0.0	0.0							1.1	3.3	8.7	0.7	0.1	0.0
	90-95	0.9	0.0	0.0	58.7	19.7							0.7	0.2	0.5	22.4	13.8	0.9
	95-99	2.4	0.0	0.0	6.0	73.6							0.5	0.2	0.1	24.1	39.0	10.5
	99+	0.5	0.0	0.0	0.5	7.0							0.0	0.0	0.0	7.5	50.3	42.2
Wealth	0-1	1.3	1.8	2.5	4.8	0.0	4.9	6.2	5.3	3.4	2.0	0.0						
	1-5	1.3	2.8	3.4	0.9	0.3	2.1	4.9	4.1	0.2	0.2	0.0						
	5-10	0.9	4.0	6.2	1.0	0.1	2.8	8.5	8.7	0.5	0.1	0.0						
	90-95	1.2	0.7	1.0	17.4	22.1	0.0	0.6	0.7	22.3	19.3	1.5						
	95-99	3.4	0.1	0.6	11.4	28.7	0.4	0.5	0.1	17.3	39.0	12.6						
	99+	3.5	0.0	0.0	5.3	25.4	0.3	0.0	0.0	4.4	41.7	42.1						

Notes: Overlap of the earnings, income, and wealth distribution. Rows show the position of the household (column 2) along the respective distribution (column 1). Columns give the share of households that are in the respective groups (row 2) of the respective second distribution (row 1).

the earnings-richest; 85 percent of the income-richest are among the earnings-richest. Few households among the income-richest are among the earnings-poorest. The income- and earnings-richest are also very wealthy. Two-thirds of those in the top 10 percent of the earnings or income distribution are also in the top 10 percent of the wealth distribution. The wealth-richest in most cases also have a lot of earnings or income. However, 3.5 percent of them are also among the earnings-poorest, but less than 1 percent are among the income-poorest. Although being among the earnings-poorest can happen because of low business income, a sufficiently high amount of capital income seems to prevent the wealth-richest from ending up at the bottom of the income distribution. More than 70 percent of the wealth-richest are among the top 10 percent of the earnings distribution, with 38 percent being among the earnings-richest. Income is similar: almost 90 percent of the wealth-richest are in the top 10 percent of the income distribution, and 42 percent are even among the income-richest households. We conclude that there is considerable overlap among the rich, even if a few of those very rich in earnings or income have very little wealth and vice versa.

In Table 18 we restrict the sample to households with a household head between ages 35 and 55 in order to abstract from life-cycle effects. Excluding elderly households that have no earnings draws a much sharper line between the poor and the rich. Now 86 percent of the earnings-poorest are in the bottom 10 percent of the income distribution, and only 4 percent are in the top 10 percent. As before, the earnings-richest are also income-rich and wealth-rich. The wealth-poorest are neither earnings- nor income-poor. The wealth-richest are again earnings- and income-rich.

Table 18  
**Joint distribution of the poor and the rich for ages 35–55**

	Earnings						Income						Wealth					
	0–1	1–5	5–10	90–95	95–99	99+	0–1	1–5	5–10	90–95	95–99	99+	0–1	1–5	5–10	90–95	95–99	99+
Earnings	0–1						48.7	37.3	0.0	3.1	0.4	0.5	3.4	8.8	0.0	3.5	3.5	0.1
	1–5						0.0	40.1	51.8	0.0	0.0	0.0	1.2	5.5	10.0	0.4	0.0	0.0
	5–10						10.1	16.5	6.4	0.0	0.0	0.0	0.8	5.8	13.2	1.3	0.6	0.0
	90–95						0.0	0.0	0.0	79.5	5.3	0.1	0.2	0.6	1.6	21.2	18.1	0.8
	95–99						0.0	0.0	0.0	11.6	84.8	3.6	0.0	0.0	0.0	27.5	41.7	7.9
	99+						0.0	0.0	0.0	0.0	16.4	83.6	0.0	0.0	0.0	5.5	48.4	46.2
Income	0–1	49.0	0.0	51.0	0.0	0.0	0.0						3.5	11.5	4.3	0.0	2.3	0.0
	1–5	9.3	40.1	20.5	0.0	0.0	0.0						2.1	3.5	12.5	1.3	0.0	0.0
	5–10	0.0	41.5	6.4	0.0	0.0	0.0						0.0	5.3	13.1	0.4	0.0	0.0
	90–95	0.6	0.0	0.0	79.3	9.3	0.0						0.2	0.6	1.4	20.2	23.3	1.0
	95–99	0.1	0.0	0.1	6.6	84.8	4.1						0.0	0.0	0.0	27.1	40.4	7.1
	99+	0.5	0.0	0.0	0.3	14.3	83.4						0.0	0.0	0.0	1.4	44.5	54.0
Wealth	0–1	3.5	4.7	4.0	0.8	0.0	0.0	3.5	8.7	0.0	0.8	0.0	0.0					
	1–5	2.2	5.4	7.3	0.7	0.0	0.0	2.8	3.5	6.6	0.8	0.0	0.0					
	5–10	0.0	8.0	13.1	1.6	0.0	0.0	0.9	10.0	13.1	1.4	0.0	0.0					
	90–95	0.7	0.3	1.3	21.2	22.0	1.1	0.0	1.0	0.4	20.2	21.6	0.3					
	95–99	0.9	0.0	0.7	22.7	41.7	12.1	0.6	0.0	0.0	29.1	40.4	11.2					
	99+	0.1	0.0	0.0	4.1	31.7	46.2	0.0	0.0	0.0	4.8	28.2	54.2					

Notes: Overlap of the earnings, income, and wealth distribution. Rows show the position of the household (column 2) along the respective distribution (column 1). Columns give the share of households that are in the respective groups (row 2) of the respective second distribution (row 1).

### *Correlations between Earnings, Income, and Wealth*

A different way to summarize the joint behavior of the main variables is to compare the correlation coefficients of earnings, income, and wealth with each other and with the four sources of income, namely, labor income, capital income, business income, and transfers (see Table 19). Consistent with the previous tables, we see a reasonably high correlation between earnings and wealth (0.53). Because earnings is the main component of income, the correlation of these two variables is much higher at 0.80.

Except for transfers, sources of income are correlated with each other and with earnings, income, and wealth. Labor income and business income are clearly correlated with earnings, because the former is part of earnings, as is a sizable fraction of the latter. Labor income is least correlated with wealth, mostly because of the retired status of many wealthy households. The correlation between wealth and capital income is 0.32 (we explore this issue in detail in the previous subsection entitled “Wealth as Source of Income” because we think that this value is low).

Finally, the correlation of transfers with earnings and labor income is negative, but not by a lot (we would have expected a much more negative value if transfers were just pensions). Still, transfers and wealth are positively correlated, indicating that pensions constitute the bulk of transfers.

If we look only at households with a head between 35 and 55 years of age, for whom retirement is not an issue, the correlations between the three main variables change somewhat. All correlations are larger than for the population as a whole.

Table 19

**Correlation coefficients of earnings, income, and wealth**

	Earnings	Income	Wealth	Income sources			
				Labor	Capital	Business	Transfers
All households							
Earnings	1						
Income	.80	1					
Wealth	.53	.58	1				
Labor	.69	.52	.25	1			
Capital	.17	.72	.32	.12	1		
Business	.77	.65	.51	.08	.13	1	
Transfers	-.05	.07	.14	-.09	.05	.01	1
Households with head age 35–55							
Earnings	1						
Income	.95	1					
Wealth	.59	.64	1				

***Some Dynamic Distributional Aspects***

The SCF is a cross-sectional data set; as such, it has no repeated information about how the same households fare over time. It does, however, have some information about the financial history of the household from retrospective questions (for example, about inheritances). The period between 2007 and 2009 is a rare exception because households of the 2007 survey were reinterviewed in 2009, so we can analyze how they have fared over time. We use this panel information and apply the earnings, income, and wealth partition to the 2007 and 2009 data.<sup>16</sup>

***Persistence of Earnings, Income, and Wealth***

The period from 2007 to 2009 is exceptional, with a large decline in asset prices and a spike in unemployment rates. This characteristic renders this period unlikely as a good description of normal times, but it is informative about how extreme macroeconomic events reshape the earnings, income, and wealth distribution. It might also be helpful in shedding some light on the sources and consequences of the crisis by providing a micro view of households over this period. Table 20 shows the transition matrix for earnings, income, and wealth between 2007 and 2009. Rows show the position in 2007 and columns the position in 2009.<sup>17</sup> Persistence in the quintiles is higher in the extremes, and persistence of wealth is only slightly higher than that of earnings or income. The mobility patterns are highly symmetric across the distribution.

***The Role of Inheritances***

In the SCF interview, households are asked if they have ever received “an inheritance, or been given substantial assets in a trust or in some other form.” Answers are supposed to exclude inheritances from deceased spouses. Answers include the year in which the inheritance oc-

curred. We transform past inheritances into 2013 values by adjusting them for inflation and using a 3 percent rate of return.<sup>18</sup> The SCF also asks about expected inheritances (including those from spouses), and we compute these amounts at face values. The first column of Table 21 shows the amounts involved and how they compare with total household wealth. We see that total inherited wealth amounts to about 21 percent of all wealth, a little above the 19 percent reported by Wolff and Gittleman (2014) for 2007. Expected inheritances are lower than the accumulated value of bequests, amounting to about 12 percent of wealth.

We use the same logic to calculate for each group of households (sorted by wealth) how much of their current wealth is accounted for by bequests and how much by expected bequests. Table 21 also shows those amounts. Interestingly, we see that the really wealthy do not owe most of their wealth to inheritance. The amounts vary by group, but in most wealth

Table 20  
Transition matrix for earnings, income, and wealth, 2007–2009

	0–1	1–5	5–10	0–20	20–40	40–60	60–80	80–100	90–95	95–99	99–100
Earnings											
0–1	14.3	19.0	13.0	57.5	29.4	7.0	0.1	6.0	0.0	5.1	0.3
1–5	1.6	53.1	20.4	81.4	17.9	0.7	0.0	0.0	0.0	0.0	0.0
5–10	0.3	10.2	41.3	81.1	15.6	2.4	0.9	0.0	0.0	0.0	0.0
0–20	2.0	16.7	20.2	79.8	17.2	1.7	0.6	0.7	0.1	0.3	0.1
20–40	1.8	2.8	3.4	13.7	54.9	23.3	4.8	3.2	0.3	0.0	0.0
40–60	0.6	0.5	1.2	4.5	19.1	50.3	22.4	3.7	0.8	0.4	0.0
60–80	0.1	0.1	0.3	1.3	5.3	21.4	55.6	16.5	2.3	0.9	0.1
80–100	0.5	0.0	0.0	0.7	3.5	3.3	16.6	76.0	21.5	18.4	4.8
90–95	0.9	0.0	0.0	0.9	1.8	2.3	10.7	84.4	43.4	16.9	0.5
95–99	0.2	0.0	0.0	0.2	5.5	1.9	9.4	83.1	12.1	54.1	8.6
99–100	1.3	0.0	0.0	1.8	3.3	0.2	3.4	91.4	5.2	27.1	58.2
Income											
0–1	20.5	8.9	25.6	70.5	14.7	3.4	6.7	4.7	0.0	0.0	0.2
1–5	5.0	47.5	13.9	81.8	14.2	2.9	1.1	0.0	0.0	0.0	0.0
5–10	0.8	18.0	35.9	77.5	15.6	4.8	1.5	0.6	0.6	0.0	0.0
0–20	3.0	16.7	19.1	70.2	21.6	5.0	2.1	1.1	0.3	0.0	0.0
20–40	0.6	1.9	4.0	19.3	48.8	23.7	6.3	1.9	0.1	0.0	0.0
40–60	0.2	1.2	1.4	6.1	21.7	45.7	22.5	4.1	0.8	0.7	0.0
60–80	0.4	0.0	0.5	2.7	6.7	22.1	50.8	17.7	2.6	1.0	0.0
80–100	0.9	0.2	0.0	1.8	1.3	3.5	18.3	75.1	21.2	18.2	5.0
90–95	0.6	0.0	0.0	1.2	2.1	4.3	12.3	80.1	44.7	15.8	0.7
95–99	1.1	0.0	0.0	1.7	1.4	2.2	7.5	87.3	17.6	52.7	9.0
99–100	3.3	0.0	0.0	3.3	0.0	2.1	3.4	91.3	4.7	25.5	58.7
Wealth											
0–1	24.9	35.1	9.1	74.0	22.0	3.9	0.0	0.1	0.1	0.0	0.0
1–5	1.6	26.5	29.6	75.3	18.7	3.4	2.3	0.2	0.1	0.0	0.0
5–10	1.0	7.3	15.0	72.9	21.7	4.4	0.9	0.2	0.0	0.0	0.0
0–20	2.1	10.7	15.6	66.9	27.1	4.2	1.4	0.4	0.0	0.0	0.0
20–40	1.1	4.5	6.0	21.7	51.9	23.5	2.5	0.4	0.2	0.0	0.0
40–60	0.8	3.6	2.9	8.1	16.5	53.6	19.4	2.4	0.2	0.0	0.0
60–80	0.8	1.1	0.5	2.9	3.8	16.9	60.5	16.0	1.5	0.5	0.0
80–100	0.2	0.1	0.0	0.5	0.6	1.8	16.3	80.7	23.1	19.6	5.0
90–95	0.5	0.0	0.0	0.5	0.8	0.9	9.6	88.1	49.4	13.3	1.0
95–99	0.2	0.0	0.0	0.2	0.0	0.4	1.9	97.5	16.2	69.7	7.0
99–100	0.0	0.0	0.0	0.0	0.0	0.8	0.3	98.9	1.4	29.8	66.8

Notes: Transition matrix for earnings, income, and wealth from 2007 to 2009. Rows show the position in 2007 and columns the position in 2009. All numbers are percentage shares of households who move from their 2007 position to their 2009 position. Weights are representative of the population in 2009.

Table 21

**Inherited wealth, expectations on inheritance, and shares of wealth in 2013 SCF**

Wealth group	Wealth	Inheritance	Expected inheritance	Inherited wealth share	Expected inheritance as wealth share
All households	528.2	109.7	63.9	20.8%	12.1%
0–1%	–165.3	15.3	108.2	–9.2%	–65.5%
1–5%	–40.0	5.7	41.2	–14.3%	–103.1%
5–10%	–8.4	19.0	34.4	–225.3%	–406.8%
0–20%	–17.8	10.9	26.8	–61.4%	–150.2%
20–40%	17.1	10.5	36.1	61.5%	211.3%
40–60%	85.0	26.2	50.1	30.8%	58.9%
60–80%	258.5	58.9	43.6	22.8%	16.8%
80–100%	2,298.1	442.0	163.0	19.2%	7.1%
90–95%	1,278.2	227.5	87.8	17.8%	6.9%
95–99%	3,614.7	918.0	298.6	25.4%	8.3%
99–99.5%	9,468.0	1,757.7	760.1	18.6%	8.0%
99.5–99.9%	17,623.9	1,330.3	266.5	7.5%	1.5%
Top 0.1%	69,575.9	6,381.3	828.3	9.2%	1.2%

Notes: Levels of inheritance and expected inheritance in thousands of 2013 dollars from 2013 SCF. Shares of inherited wealth are the mean inheritance to mean wealth within each wealth group.

groups, average inheritance is a lower share (but a larger average amount) of that in the population at large. Because inheritances are typically received late in life, households may not yet be formed by the time they are asked via the survey, or the wealth that will generate the expected transfer is not yet accumulated.

We use the same set of questions to see how concentrated bequests are. Table 22 shows that they are very concentrated. A small part of the population receives large transfers from previous generations, but they are still not the bulk of the very rich. Three-quarters of the population has not inherited anything. On the other hand, 1 percent of the population has received more than \$1.5 million. A very similar picture arises with respect to expected bequests. Again, three-quarters of the population does not expect to receive any bequest, whereas the top 1 percent expects to receive more than \$1.25 million. This wealth transfer alone would put the household in the top 10 percent of the wealth distribution of 2013. For the top 0.01 percent, expected inheritances amount to \$13 million. Looking at received and expected inheritances jointly, we find that 70 percent of households answer that they neither received any inheritance nor expected to receive any inheritance in the future.

Table 22

**Received and expected inheritance (2013)**

Inheritance	Top 25%	Top 10%	Top 5%	Top 1%	Top 0.5%	Top 0.1%	Top 0.01%
Received	0	128	352	1,589	2,879	13,030	41,152
Expected	0	50	265	1,260	2,000	6,000	13,000

Notes: Quantiles of received and expected inheritance distribution in the 2013 SCF. All data are in thousands of 2013 dollars. Received inheritances include 3 percent real return per annum since year received.

### *Long-Run Trends: Changes between 1989 and 2013*

A note of caution is in order before we discuss the long-run trends. Using the SCF, we look at distributions across households and see that household size has experienced a secular decline. This trend alone reshapes the distributions of earnings, income, and wealth including the means and measures of inequality. In both cases, these changes have no clear normative or welfare implications. This has to be kept in mind when interpreting trends. Heathcote, Perri, and Violante (2009) document changes in inequality over time with a focus on wages, hours, consumption, and the impact of the tax and transfer system. They use data from the Current Population Survey (CPS), the Panel Study of Income Dynamics (PSID), and the Consumer Expenditure Survey (CEX) for their analysis and provide only a very limited analysis of wealth inequality from the SCF.

### *Average Performance over Time*

Table 23 reports average earnings, income, wealth, and wealth net of home equity per household between 1989 and 2013 measured in 2013 dollars. To take the effect of household sizes into account, we also use the per adult equivalent size using the OECD equivalence scales. We see that the performance of the economy as a whole is not great. Household earnings went up a paltry 0.48 percent per year, whereas per adult the rate was 0.56 percent per year. The growth of wealth was much higher: 1.82 percent per household and 1.97 percent per adult.

Table 23  
Average earnings, income, wealth, nonhousing wealth

Year	Per household				Per adult equivalent			
	Earnings	Income	Wealth	Nonhousing wealth	Earnings	Income	Wealth	Nonhousing wealth
1989	57.0	76.4	342.3	252.0	28.8	41.2	187.2	138.1
1992	57.7	77.0	303.9	226.8	29.5	41.3	172.1	127.8
1995	58.8	73.5	323.1	250.3	30.9	40.1	187.1	144.8
1998	63.8	79.9	405.2	321.8	32.8	42.8	230.7	183.4
2001	72.5	92.5	522.0	414.7	37.3	50.2	292.9	232.1
2004	69.4	87.0	553.8	416.8	35.9	46.8	313.4	234.1
2007	71.7	93.9	625.2	473.4	36.8	50.2	352.6	265.6
2010	66.6	84.0	530.0	419.4	34.0	44.9	295.9	232.2
2013	63.9	86.4	528.2	424.4	32.9	46.5	298.9	238.4

Between 1989 and 2013, income increased by 13 percent and, hence, 1 percentage point more than earnings. Wealth, however, increased more than four times as much (54 percent). Wealth net of home equity grew by 68 percent, very much in excess of earnings, income, and wealth. Home equity therefore accounts for only a fraction of the increase in wealth between 1989 and 2013. Indeed, home equity grew by only about 15 percent because of the simultaneous increase in debt. A large increase has occurred in a key ratio that economists hold dear for many issues: the wealth-to-income ratio increased from 4.5 to 6.1 between 1989 and 2013,

and its associated ratio, the wealth-to-earnings ratio, increased from 6.0 to 8.3 despite the low savings rate in the United States during those years, implying that this increase has been due to changes in the price of assets.

### *Which Households Benefited from Growth?*

We report in Table 24 the earnings, income, and wealth growth of the 30th, 50th (median), and 90th percentiles relative to the growth of the mean. We look at two periods. First, we look at the period from 1989 to 2007 excluding the financial crisis. Second, we look at the growth performance between 1989 and 2013 including the financial crisis.

Table 24

#### **Growth performance of different parts of the distributions**

	1989–2007			1989–2013		
	30th	50th median	90th	30th	50th median	90th
Earnings	31.2%	-15.4%	-5.4%	-6.2%	-25.7%	2.5%
Income	-2.5%	-10.2%	-8.7%	-5.5%	-14.2%	-1.9%
Wealth	-24.1%	-23.0%	-28.8%	-75.6%	-58.6%	-12.9%

*Notes:* Growth performance of different quantiles of the distribution relative to the mean over the indicated period.

For the first period, we find that almost all quantiles performed worse than the mean; only the 30th percentile of the earnings distribution has a positive growth differential to the mean. Looking at the relative growth performance, we find that the 30th percentile for earnings and income experienced higher growth than the median and the 90th percentile. For wealth, the 30th percentile and median grew roughly in parallel and even managed to catch up relative to the 90th percentile. The large negative numbers show, however, that the mean experienced substantial excess growth driven by the tail of the distribution beyond the 90th percentile.

For the second period, we find negative growth performance relative to the mean everywhere except for earnings of the 90th percentile. The median had the worst growth performance for earnings and income. Hence, the 30th percentile moved closer to the median, but the 90th percentile moved further away. For wealth, the growth performance is worst for the 30th percentile and improves along the wealth distribution. Still, all percentiles performed worse than the mean.

Figure 11 shows the growth performance of the different parts of the distributions from Table 24 over time. In particular, for earnings we find a strong catch-up of the 30th percentile until 2010. This outperformance got lost in the aftermath of the financial crisis. The median shows the worst growth performance throughout. For income, all parts of the distribution show a similar growth performance, with the 30th percentile dominating the other parts slightly and the median lagging behind. For wealth, we again see a close comovement over time but a huge divergence after 2007. Although the mean and the 90th percentile experienced modest reductions in wealth, the middle and lower parts of the distribution plummeted.

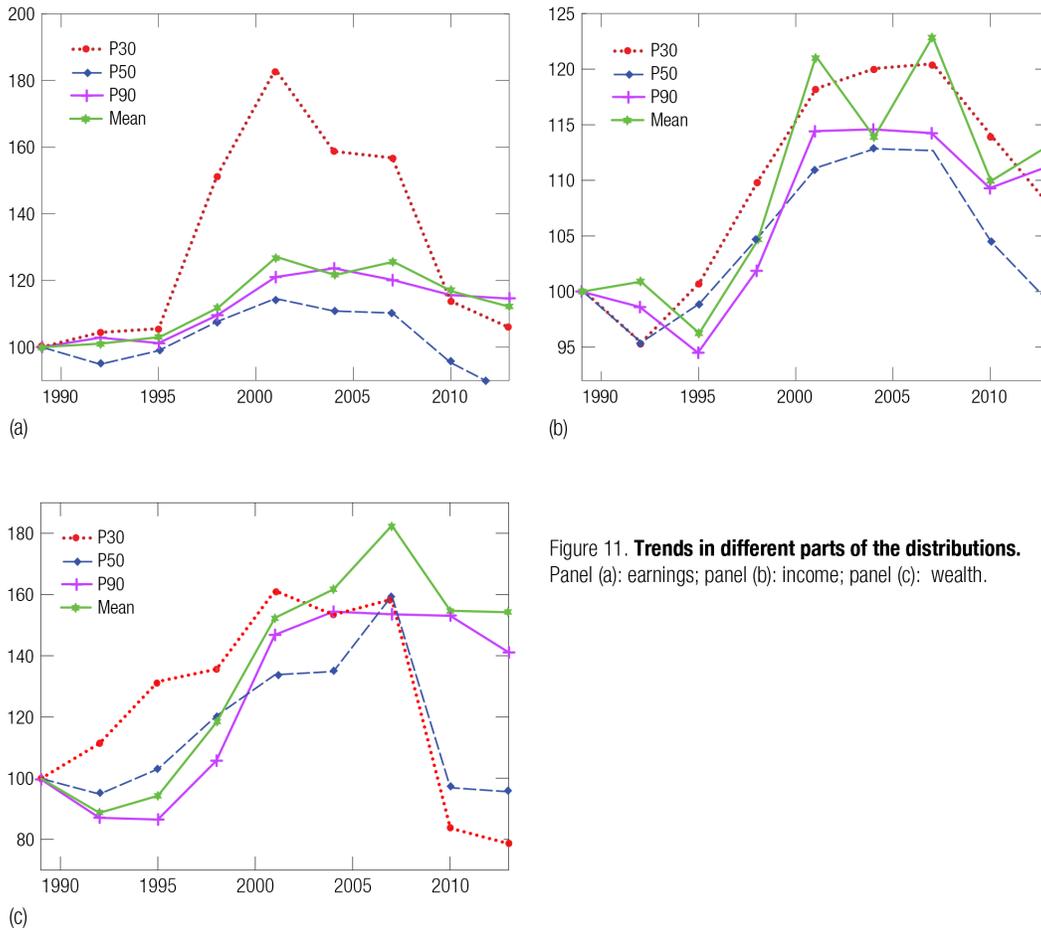


Figure 11. **Trends in different parts of the distributions.** Panel (a): earnings; panel (b): income; panel (c): wealth.

### Inequality Trends

Changes in inequality are hard to grasp. The Gini coefficient, the coefficient of variation, and the variance of logarithms emphasize inequality in different parts of the distribution, so much so that they sometimes point in different directions.<sup>19</sup> We therefore use all three statistics to explore changes in inequality, and we display them in Table 25 for earnings, income, wealth, and wealth net of home equity ( $W-H$ ).

The trend for earnings inequality from these statistics is unambiguous. All inequality statistics show a U-shaped pattern, with the trough at the 1998 survey and an increase in inequality since then. At first glance, this trend contradicts our results about growth rates of different parts of the distribution in Table 24, where the 30th percentile moved closer to the median, pointing toward less inequality at the bottom of the distribution. However, earnings growth at the top of the distribution dominates the inequality trends.

The trend for income inequality is ambiguous. The Gini coefficient is roughly constant, with the exception of 2013 when it is slightly higher. The Gini coefficient puts more weight on

Table 25

**Changes in concentration of earnings, income, wealth, and wealth net of home equity ( $W-H$ )**

	Coefficients of variation				Gini indexes				Variance of the logs			
	Earnings	Income	Wealth	$W-H$	Earnings	Income	Wealth	$W-H$	Earnings	Income	Wealth	$W-H$
1989	4.47	4.61	5.51	7.23	.61	.55	.79	.87	1.42	1.08	4.29	4.59
1992	4.19	3.84	6.11	7.95	.63	.57	.79	.86	1.36	1.20	3.91	4.34
1995	3.53	4.63	6.28	7.86	.62	.55	.79	.86	1.25	1.28	3.49	3.79
1998	2.86	3.56	6.47	7.93	.61	.55	.80	.86	1.20	1.21	4.02	4.36
2001	2.88	3.63	5.25	6.32	.62	.57	.81	.86	1.29	1.11	4.19	4.49
2004	3.00	3.11	5.68	7.18	.62	.54	.81	.87	1.27	1.01	4.38	4.87
2007	3.60	4.32	6.01	7.59	.64	.57	.82	.88	1.29	0.99	4.39	4.77
2010	3.26	3.45	6.35	7.70	.65	.55	.85	.89	1.41	0.92	4.65	5.03
2013	3.69	4.19	6.81	8.18	.67	.58	.85	.90	1.50	0.99	4.80	5.14

parts of the distribution where most households are, typically the middle of the distribution. The coefficient of variation and the variance of logarithms both show decreasing inequality. The coefficient of variation emphasizes the tails of the distribution, and the variance of logarithms puts most weight on the lower tail. The falling trend of the coefficient of variation and the variance of logs uncovers a trend toward less inequality at the bottom of the distribution, or put differently, that the bottom of the distribution moved closer to the middle. We have already seen this trend in Table 24. From this point of view, income inequality, unlike earnings inequality, actually decreased.

The trend for wealth inequality is again unambiguous. All inequality statistics point toward more inequality over time. Wealth net of home equity is the most unequal variable. Its trend closely follows the trends of wealth inequality.

Finally, Table 26 shows different measures of skewness that are closely related to our discussion of the growth performance in different parts of the distribution. The mean-to-median ratios show a large monotonic increase over the period for all variables, in line with what we have seen in Table 24 and Figure 11. The 50–30 ratio for earnings and income has decreased (earnings displayed an increase between 2007 and 2013 but stayed below its 1989 level), whereas for wealth there is no clear trend. The 90–50 ratio increased in line with an outperformance of the upper part of the distribution relative to the median.

### *Trends in the Joint Distribution*

To study the evolution of joint distribution, Figure 12 displays the correlations between earnings, income, and wealth in each survey year. Although the correlation between earnings and income oscillates a bit at a very high level, the correlation of wealth with the other two variables shows a strong increase, in particular during the nineties. During the nineties, the correlation stabilized at almost twice the initial level. If we look further into the tail of the income distribution, we find the same pattern emerging.

Table 26

**Changes with respect to the medians in earnings, income, wealth, and wealth net of home equity ( $W-H$ )**

	Mean-to-median ratios				50–30 ratios				90–50 ratios			
	Earnings	Income	Wealth	$W-H$	Earnings	Income	Wealth	$W-H$	Earnings	Income	Wealth	$W-H$
1989	1.51	1.62	4.02	8.66	3.94	1.79	4.52	5.44	3.12	2.96	7.82	15.82
1992	1.61	1.71	3.76	8.41	3.58	1.79	3.85	4.33	3.39	3.06	7.20	14.33
1995	1.58	1.58	3.68	7.43	3.69	1.75	3.54	3.52	3.20	2.83	6.58	12.34
1998	1.57	1.62	3.95	7.66	2.80	1.71	4.02	4.54	3.18	2.88	6.88	12.59
2001	1.68	1.77	4.58	8.31	2.46	1.68	3.75	4.42	3.30	3.05	8.59	14.66
2004	1.66	1.64	4.82	9.77	2.75	1.68	3.98	5.16	3.48	3.01	8.97	17.43
2007	1.72	1.77	4.60	10.39	2.77	1.67	4.56	4.76	3.41	3.00	7.54	15.59
2010	1.85	1.70	6.42	13.18	3.30	1.64	5.24	4.11	3.79	3.10	12.37	23.33
2013	1.96	1.85	6.49	14.17	3.21	1.64	5.50	3.79	4.15	3.33	11.56	23.02

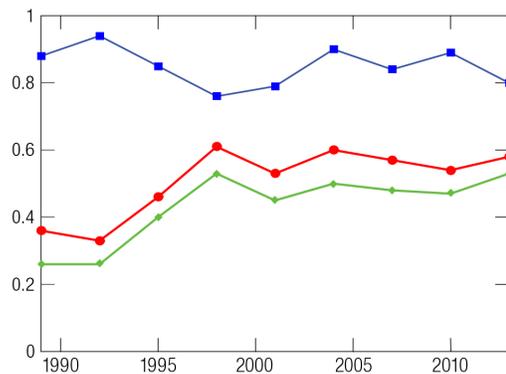


Figure 12. **Correlation between earnings, income, and wealth.** Blue squares show the correlation between earnings and income, red dots the correlation between wealth and income, and green diamonds the correlation between wealth and earnings.

### *Focus on the Great Recession*

Between 2007 and 2013, mean earnings dropped by 11 percent, mean income dropped by 8 percent, and mean wealth dropped by 16 percent. The drop in wealth resulted almost equally from drops in home equity and nonhousing wealth (51 percent of the drop in wealth is accounted for by the drop in nonhousing wealth; nonhousing wealth dropped by 11 percent between 2007 and 2013). Heterogeneity is evident in how households in different parts of the distributions fared. Median earnings, income, and wealth all plummeted below their 1989 levels by 2013. Relative to 2007, median earnings decreased by 22 percent, income by 12 percent, and wealth by 40 percent. For households at the 90th percentile, the effects are much less severe. These households lost only 5 percent in earnings, 3 percent in income, and 8 percent in wealth. This put them in a situation similar to 2001. Households at the 30th percentile have lost 33 percent in earnings, 11 percent in income, and 50 percent in wealth. Thanks to their outperformance in growth until 2007, their earnings and income level dropped back to

the level of the mid-1990s. Their wealth, however, is below its 1989 level.

Transfers have gained in importance during the crisis. In 2007, 10.3 percent of income came from transfers. By 2010, this number had risen to 13.5 percent; by 2013, it had risen even further to 14.3 percent. In 2013, transfers are the second most important income source, after labor income. By contrast, in 1989 transfer income made up a smaller fraction of income than capital and business income. This was still true during the 2000s. In 2007, capital income and transfer income were equally important, but business income was still more important. This trend is partly driven by an aging population but also by larger transfer shares of all age groups.

Between 2007 and 2013, the Gini coefficients of earnings, income, and wealth all increased. In 2013, all three Gini coefficients were at their all-time highs of the sample period. By contrast, the coefficient of variation for earnings and income stayed roughly constant. It increased sizably, however, for wealth and nonhousing wealth.

## Other Dimensions of Inequality

Some characteristics of households that are closely related to earnings, income, and wealth are age, education, employment status, and marital status, and the SCF collects this information. We sort the population according to those four criteria and report for each of the groups their average earnings, income, and wealth; their Gini indexes; the average shares of their income source; the relative group size; and the average number of people per household.

Our main finding is that although there are systematic implications of these features for earnings, income, and wealth (hump-shaped age-earnings and age-income profiles, better performance of the self-employed, the educated, and the married), the amount of inequality within groups is almost as large as that for society as a whole.

## *Age and Inequality*

Some of the differences in earnings, income, and wealth across households can be safely attributed to the differences in people's ages—so much so that a large literature in economics organizes its models around the households' life cycle. We organize the cross-sectional data of the 2013 SCF into 10 cohorts according to the age of the household head, compute the relevant statistics for each cohort, report these statistics in Table 27, and display most of them in Figure 13.

Although Table 27 shows the average variables in dollars, Figure 13(a) displays them normalized by their corresponding sample averages. Earnings and income display the typical hump shape conventionally attributed to the life cycle. Average cohort earnings are monotonically increasing in the age of household heads until age 50, and they start to decline thereafter. Not surprisingly, average earnings of households with a head over age 65 drop to only about one-third of the sample average because of retirement. Average income peaks at age 51–55 and decreases thereafter. It drops about one-third for the group over age 65, and the dip really starts only around age 60. In contrast, average cohort wealth increases over the life cycle, and it peaks in the 61–65 cohort, a full 10 years after both earnings and income. The group over age 65 is still significantly wealthy: it owns about 50 percent more wealth than the sample average, and it is wealthier than any of the cohorts age 60 and under. This finding is due in

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Table 27  
Age partition of the 2013 sample

Age	Averages			Income sources (%)					Gini indexes			Coefficient of variation				
	<i>E</i>	<i>Y</i>	<i>W</i>	<i>L</i> <sup>d</sup>	<i>K</i> <sup>e</sup>	<i>B</i> <sup>f</sup>	<i>Z</i> <sup>g</sup>	<i>O</i> <sup>h</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>H</i> (%) <sup>i</sup>	<i>Size</i> <sup>j</sup>
< 25	22.4	26.3	26.7	84.0	0.4	1.5	4.3	9.9	.52	.41	1.31	1.1	0.9	13.1	6.2	2.40
26–30	45.0	49.0	67.3	87.8	0.4	4.6	4.1	3.1	.44	.39	1.03	0.9	0.8	6.2	7.4	2.72
31–35	66.3	71.3	132.5	86.8	2.0	6.9	2.6	1.7	.45	.42	0.88	1.1	1.1	4.8	8.8	3.23
36–40	86.4	95.7	289.1	81.0	2.9	10.5	2.9	2.7	.56	.53	0.86	3.0	3.5	10.2	8.4	3.59
41–45	100.2	109.1	432.3	73.3	2.5	20.8	2.2	1.1	.57	.56	0.87	2.7	2.9	5.2	9.1	3.31
46–50	85.7	99.9	474.1	74.8	6.6	12.4	4.1	2.1	.54	.53	0.83	1.9	2.4	6.8	9.5	2.99
51–55	97.2	112.6	665.5	74.0	5.1	13.9	5.5	1.6	.63	.60	0.83	4.3	4.2	8.1	10.1	2.63
56–60	84.0	108.0	744.6	64.2	9.3	15.4	9.0	2.2	.63	.60	0.80	3.5	4.9	4.6	9.8	2.22
61–65	65.5	108.0	892.1	47.5	15.7	14.9	18.6	3.3	.71	.61	0.82	4.1	5.3	5.0	8.8	2.10
66+	23.0	72.8	831.3	21.1	16.4	11.8	48.6	2.2	.91	.61	0.79	7.7	4.7	5.5	22	1.77
Total	63.9	86.4	528.2	62.5	8.0	13.0	14.3	2.3	.67	.58	.85	3.7	4.2	6.8	100	2.58

Notes: <sup>a</sup> Earnings; <sup>b</sup> income; <sup>c</sup> wealth; <sup>d</sup> labor; <sup>e</sup> capital; <sup>f</sup> business; <sup>g</sup> transfers; <sup>h</sup> other; <sup>i</sup> percentage of households of each type; <sup>j</sup> average number of persons per primary economic unit.

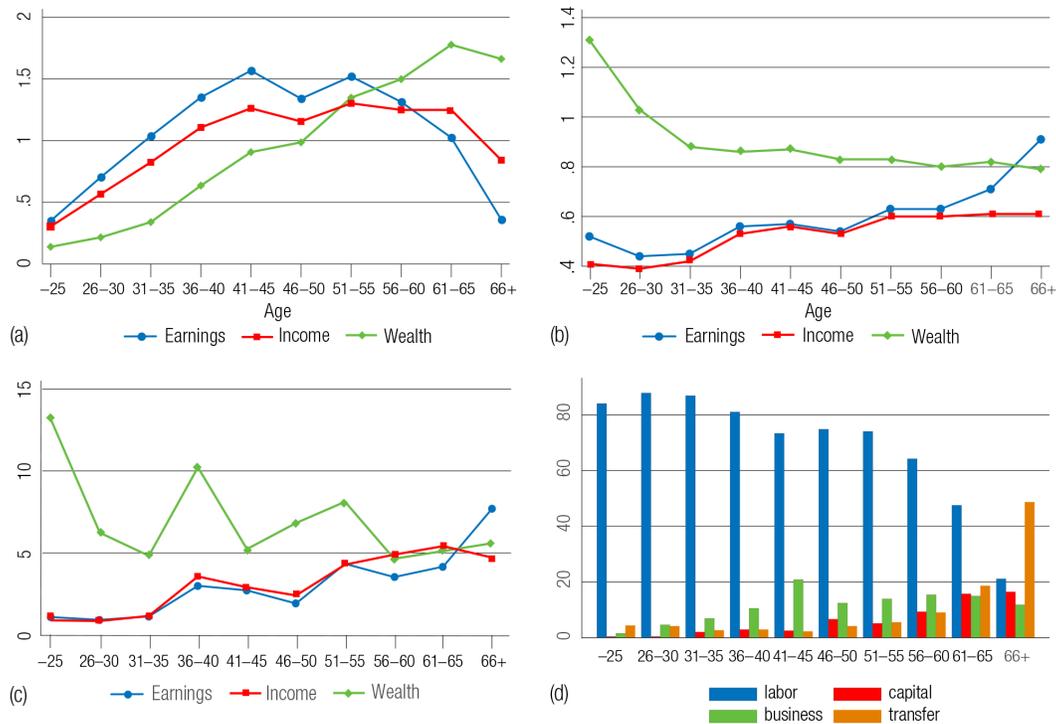


Figure 13. **Age and inequality.** Panel (a): average earnings, income, and wealth; panel (b): Gini indexes; panel (c): coefficients of variation; panel (d): sources of income.

part to several characteristics: the age range of this group is quite large (life does not end at 70), there is selection, that is, the rich tend to live longer (Pijoan-Mas and Ríos-Rull 2014), and there are concerns about possible bequests and end-of-life expenditures (De Nardi, French, and Jones 2010 and Ameriks et al. 2015). In fact, the SCF has information about both bequeathing expectations and medical expenditures that seems to confirm the importance of these concerns. The 2013 survey includes a question about whether respondents “expect to leave a sizeable estate to others.” The fraction that said yes decreases with age: less than one-third of households age 35 and younger answered no, and roughly 40 percent answered yes. Among households age 65 and older, more than 55 percent answered no and only about 25 percent answered yes. Over the life cycle, we find that there is a monotonic decrease of this expectation.<sup>20</sup> The SCF also asks households about any foreseeable major expenses in the next 5 to 10 years. In the group of households age 65 and older, 25 percent expect major expenses for health care.

Substantial inequality is evident within cohorts. The Gini indexes of earnings and income are moderately increasing with age (that of earnings increases significantly toward the end of the life cycle, mostly because of dispersion in the age of retirement). In contrast, the Gini index of wealth is largest among the young: its highest value corresponds to the under-25 cohort. It decreases slightly until its lowest value for the cohort age 65 and over. Because many households hold negative wealth when young, the Gini index even exceeds 1 for households with a household head age 30 and younger. The coefficients of variation also display large inequality within groups, with those of earnings and income increasing and that of wealth showing a slight downward trend. Income sources by age are roughly monotonic. The share of labor income decreases, whereas those of capital, business, and, not surprisingly, transfers increase with age. The share of business income remains substantial even after age 65, suggesting that business owners either retire a bit later than workers or are able to maintain their business income despite having retired.

### ***Education and Inequality***

We organize educational attainment in five education groups and call this the education partition. We assign the household the educational attainment of its head. The five education groups are *Dropouts* for persons who did not have a high school degree even if they never attended, *High school* for those persons who report as their highest degree a high school degree, *Some college* for persons who have more than 13 years of education, *College* for those persons who hold a college degree, and *Postgraduate* for persons who hold a graduate degree starting with a master’s degree.

As shown in Table 28, there is a close association between education and the economic performance of households. Postgraduates earn 73 percent more than college graduates, who in turn earn 140 percent more than high school graduates. Dropouts earn 12 percent of postgraduate households and 21 percent of college households. The differences in wealth holdings are even larger: postgraduate households hold 2.3 times as much wealth as college households, who own 3.6 times as much wealth as high school households, and postgraduates and college households hold 15 times and 6.6 times more wealth, respectively, than dropouts. The differences in income among the education groups, although still large, are somewhat smaller than

the differences in either earnings or wealth, partly because of the equalizing effect of transfers, which are much larger for dropouts. The average postgraduate household is rich; average earnings, income, and wealth are above the 90th percentile of the respective distribution. This finding is also reflected in Tables 6, 7, and 8, where postgraduates are always overrepresented among rich households.

Table 28  
Education partition of the 2013 sample

Education	Averages			Income sources (%)					Gini indexes			Coefficient of variation				
	<i>E</i>	<i>Y</i>	<i>W</i>	<i>L</i> <sup>d</sup>	<i>K</i> <sup>e</sup>	<i>B</i> <sup>f</sup>	<i>Z</i> <sup>g</sup>	<i>O</i> <sup>h</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>H</i> (%) <sup>i</sup>	Size <sup>j</sup>
Dropouts	18.5	29.8	107.7	58	1.5	4.6	33.7	2.3	0.68	0.40	0.80	1.89	1.28	11.75	11.0	2.81
High school	36.4	50.5	199.7	65.3	2.5	7.7	22.7	1.8	0.60	0.43	0.79	1.67	1.83	6.69	31.3	2.57
Some college	44.0	60.9	318.1	62.8	3.3	10.6	18.9	4.3	0.61	0.49	0.86	2.11	2.21	6.86	18.9	2.48
College	88.1	114.8	714.9	63.8	9.9	14.5	9.4	2.3	0.60	0.55	0.82	3.05	4.26	6.23	26.3	2.53
Postgraduate	152.0	205.1	1647.6	59.4	12.1	16.5	10.2	1.7	0.63	0.58	0.77	3.33	3.35	4.16	12.5	2.63
Total	63.9	86.4	528.2	62.5	8.0	13.0	14.3	2.3	0.67	0.58	0.85	3.69	4.19	6.81	100.0	2.58

Notes: <sup>a</sup> Earnings; <sup>b</sup> income; <sup>c</sup> wealth; <sup>d</sup> labor; <sup>e</sup> capital; <sup>f</sup> business; <sup>g</sup> transfers; <sup>h</sup> other; <sup>i</sup> percentage number of households per group; <sup>j</sup> average number of persons per primary economic unit.

Some of the differences across households can be accounted for by their composition. Table 29 partitions the sample of married households by educational attainment of head and spouse. A strong sorting pattern is evident, with most mass concentrated along the main diagonal. This sorting pattern reinforces earnings and income inequality among households. Another perspective is found in Table 30, which shows household income by education of head and spouse. Household income increases with the educational attainment of both spouses.

In the second block of Table 28, we report the income sources of the education groups. Labor is the main source of income for all five education groups. Capital income is low for dropouts and high school graduates, slightly higher for households with some college, and significantly higher for households with college and postgraduate degrees. Postgraduates and college graduates are the most enterprising of the five groups, as measured by their share of business income and the fact that the share of business income increases with education. Transfers are decreasing in education.

The third and fourth blocks of Table 28 report the Gini indexes and coefficients of variation of the education groups. Inequality within education groups is smaller than for society at large, especially when measured by the coefficient of variation that weighs the upper tail more. The table ends with information about the size of each education group and the average number of household members. Family size has a U-shape.

### ***Employment Status and Inequality***

Table 31 partitions the 2013 SCF sample according to the employment status of the head: worker, self-employed, retired, nonworker (NW), and disabled nonworker. The differences across these groups are substantial. The self-employed, which are only 10 percent of the

Table 29

**Education of spouses by education of household head**

	Spousal education (%)					Fraction of households (%)
	Dropout	High school	Some college	College	Postgraduate	
Dropout	45.9	34.7	10.7	6.9	1.8	10.3
High school	9.4	50.0	15.9	20.8	4.0	31.2
Some college	3.9	28.4	33.5	27.0	7.2	16.1
College	1.1	15.8	15.0	50.2	18.0	26.9
Postgraduate	0.6	8.7	10.1	40.1	40.5	15.4

Notes: Rows show the education of the head and columns the education of the spouse. The column sum shows the distribution across married heads of households.

Table 30

**Income by education of head and spouse in 2013 (thousands of dollars)**

Education of head	Education of spouse				
	Dropout	High school	Some college	College	Postgraduate
Dropout	30.8	39.4	51.6	59.8	81.6
High school	37.1	57.7	67.5	91.7	107.5
Some college	45.4	79.7	73.9	110.1	149.3
College	82.2	102.8	119.2	168.8	202.5
Postgraduate	37.2	185.3	165.7	255.7	283.1

Notes: Total income for married households according to educational attainment of head and spouse. Rows show the education of the head and columns the education of the spouse.

sample, have almost twice the earnings and seven times the wealth of workers, who are the vast majority of households (57 percent). The earnings of workers are about 25 percent higher than the sample average, but their wealth is about 60 percent that of the average household. Although this partition of the population refers to income sources, the existence of multiple persons in the household adds some further variety. The earnings of disabled nonworker households (about 6 percent of the sample) are quite low; their income is almost three times higher but is still much lower than that of any other group, as is their wealth. Inequality is, in most instances, as large as inequality is overall. The high coefficient of variation of wealth for nonworkers stands out, suggesting that although their average wealth is modest, there are some wealth-rich among the groups of nonworkers.

***Marital Status and Inequality***

Table 32 sorts the 2013 SCF sample according to the marital status of the household heads, distinguishing singles by sex and the existence of dependents. Because of their nontrivial size, we look at retired widows separately.<sup>21</sup>

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Table 31  
**Employment partition of the 2013 sample**

Occupation	Averages			Income sources (%)					Gini indexes			Coefficient of variation				
	<i>E</i>	<i>Y</i>	<i>W</i>	<i>L</i> <sup>d</sup>	<i>K</i> <sup>e</sup>	<i>B</i> <sup>f</sup>	<i>Z</i> <sup>g</sup>	<i>O</i> <sup>h</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>H</i> (%) <sup>i</sup>	Size <sup>j</sup>
Worker	78.3	87.1	314.5	86.9	3.1	3.3	5.1	1.6	.51	.49	.82	2.5	2.7	5.3	56.9	2.82
Self-employed	146.1	208.4	2,121.0	31.7	17.6	43.3	6.2	1.1	.71	.70	.81	3.8	4.4	4.6	9.7	2.79
Retired	13.3	58.6	613.4	17.8	14.3	5.5	58.6	3.7	.92	.54	.76	6.2	4.9	4.7	20.8	1.84
Nonworker (NW)	19.6	35.5	131.7	51.5	2.3	4.1	31.6	10.5	.78	.51	.95	2.1	1.4	5.8	12.6	2.51
Disabled NW	9.3	26.5	104.2	33.3	.7	2.2	58.1	5.7	.87	.44	.96	2.6	1.1	8.3	5.6	2.1
Total	63.9	86.4	528.2	62.5	8.0	13	14.3	2.3	.67	.58	.85	3.7	4.2	6.8	100.0	2.58

Notes: <sup>a</sup> Earnings; <sup>b</sup> income; <sup>c</sup> wealth; <sup>d</sup> labor; <sup>e</sup> capital; <sup>f</sup> business; <sup>g</sup> transfers; <sup>h</sup> other; <sup>i</sup> percentage number of households per group; <sup>j</sup> average number of persons per primary economic unit.

Table 32  
**Marital status partition of the 2013 sample**

Marital status	Averages			Income sources (%)					Gini indexes			Coefficient of variation				
	<i>E</i>	<i>Y</i>	<i>W</i>	<i>L</i> <sup>d</sup>	<i>K</i> <sup>e</sup>	<i>B</i> <sup>f</sup>	<i>Z</i> <sup>g</sup>	<i>O</i> <sup>h</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>H</i> (%) <sup>i</sup>	Size <sup>j</sup>
Married	90.9	119.1	751.9	64.3	8.8	13.5	11.6	1.8	.60	.54	.82	3.2	3.8	5.8	57.2	3.19
Single	27.9	42.8	229.8	55.5	5.2	11.1	24.3	3.9	.70	.51	.87	4.7	4.1	9.4	42.8	1.76
Single w/dependents	26.8	38.6	131.5	58.6	3.9	12.2	19.8	5.5	.64	.48	.92	2.7	2.6	7.1	17.5	2.86
Male	37.0	47.7	205.0	53.1	3.4	27.7	12.8	3.1	.71	.59	.91	3.3	3.1	7.2	4.6	2.58
Female	23.1	35.3	105.5	61.2	4.2	4.8	23.2	6.6	.60	.43	.92	1.8	2.2	6.0	12.9	2.96
Single w/o dependents	28.8	45.7	297.8	53.8	5.9	10.4	26.9	3.0	.73	.52	.84	5.6	4.7	9.1	25.3	1
Male	39.5	56.0	371.2	58.0	6.8	14.2	19.2	1.8	.72	.57	.89	6.1	5.8	10.9	10.6	1
Female w/o	21.0	38.2	244.8	49.3	5.0	6.4	35.1	4.2	.73	.46	.78	2.2	1.6	3.8	14.7	1
Retired widows	1.2	26.8	265.5	1.5	7.1	3.2	86.4	1.8	1.01	.38	.66	19.4	1.6	2.1	3.8	1
Total	63.9	86.4	528.2	62.5	8.0	13.0	14.3	2.3	.67	.58	.85	3.7	4.2	6.8	100.0	2.58

Notes: <sup>a</sup> Earnings; <sup>b</sup> income; <sup>c</sup> wealth; <sup>d</sup> labor; <sup>e</sup> capital; <sup>f</sup> business; <sup>g</sup> transfers; <sup>h</sup> other; <sup>i</sup> percentage number of households per group; <sup>j</sup> average number of persons per primary economic unit.

Married households are naturally larger than single ones. For this reason, Table 33 reports earnings, income, and wealth per adult equivalent using the OECD equivalence scales. The differences across households in Table 32 have been reduced, yet they are still very large: married households have 80 percent higher earnings and wealth and 60 percent higher income than single households. Transfers are higher for singles, and there is still a large amount of within-group inequality.

**Long-Run Trends in Inequality: Changes between 1989 and 2013**

We now explore how the various groups in these four partitions of the population have fared since the 1989 SCF.

Table 33

**Marital status partition of the 2013 sample normalized by size using OECD equivalence scales**

	Earnings	Income	Wealth
Married	40.4	55.1	369.2
Single	22.8	35.2	205.2
Single with dependents	14.1	20.1	71.7
Male single with dependents	20.6	26.5	117.5
Female single with dependents	11.8	17.8	55.4
Single without dependents	28.8	45.6	297.4
Male single without dependents	39.5	55.9	370.6
Female single without dependents	21.0	38.2	244.5
Retired female widows	1.2	26.8	265.5
Total	32.9	46.5	298.9

*Age and Inequality*

Table 34 shows the differences in the growth rates of earnings, income, and wealth between each age group and that of a counterfactual population with a constant age structure. With the exception of a little blip for households with heads in their forties, the message is clear: the winners are the old, and the losers are the young. Because of increases in life expectancy, some of these changes can be attributed to delays in starting and ending the work cycle, but the asymmetry is still quite large, and this is particularly true for wealth. Two possible explanations are the increase in student loans, which has reduced the wealth of the educated young (more on this later), and asset appreciation.

Within age groups, wealth inequality increased as measured by either the Gini index or the coefficient of variation (see Table B1 in Appendix B). The increase is most pronounced for younger households and decreases with age. The picture for earnings and income is mixed: there is an overall increase for the Gini index but a decrease for the coefficient of variation. A bit of demographic change is evident: household heads are increasingly older.

Table 34

**Age partition growth performance**

	1989–2013		
	Earnings (%)	Income (%)	Wealth (%)
< 25	-26.8	-29.4	-80.3
26–30	-11.6	-11.4	-63.2
31–35	-10.5	-7.4	-27.8
36–40	-11.2	-7.8	-17.7
41–45	7.3	5.6	-16.3
46–50	-11.1	-23.2	-40.6
51–55	1.4	3.9	-7.4
56–60	18.0	4.1	16.3
61–65	29.9	33.2	7.7
66+	33.7	15.0	32.4
Total	2.1	4.7	18.2

*Notes:* Growth rate difference relative to the counterfactual average growth rate (computed by fixing the age distribution at its 1989 level and only changing the means of the age groups. The row labeled "Total" reports the growth effect from the composition change.

### Education and Inequality

Among education groups, postgraduates are the clear winners, followed by college graduates (see Table 35). The worst performers with respect to earnings are the group with some college and the high school graduates, who both fared worse than the dropouts. With respect to wealth, the dropouts fared terribly. Although this news is devastating from the perspective of equality, the increase in overall education is the only source of good news: the share of postgraduates grew by almost 50 percent, and that of dropouts almost halved (see Table B2 in Appendix B).

Table 35

#### Education partition growth performance

	1989–2013		
	Earnings (%)	Income (%)	Wealth (%)
Dropouts	-7.0	-10.9	-50.7
High school	-10.9	-4.3	-24.2
Some college	-20.7	-15.0	-27.9
College	6.4	-1.6	9.7
Postgraduate	26.0	28.5	48.1
Total	19.0	18.0	32.0

*Notes:* Growth rate difference relative to counterfactual average growth rate. The counterfactual average growth rate is computed by fixing the distribution across education groups to 1989 and only changing the means of the education groups. The row labeled "Total" reports the growth effect from the composition change.

We want to dig a little deeper into the mechanisms behind these changes. We look at three potential determinants of the inequality that has increased across education groups: household size, wages, and hours worked.

*Household size.* To see the effect of household composition on changes in the earnings and wealth of households by education, we report in Table 36 the evolution of household sizes using the OECD equivalence scales. The changes over time are small. All groups except that of dropouts have become smaller, but the differences are not large.

*Wages and hours worked.* Table 37 extracts the household head's labor income and decomposes it into wages and hours worked.<sup>22</sup>

We construct wages for each education group and year as the ratio of average labor income to average hours worked in each group. Both hours worked and wages increase with education. A decrease in hours worked has taken place for all groups over time. This decrease is slightly higher for the lower-educated group. Still, the overwhelming change is in the relative wages of the various groups: postgraduates have gone from earning three times what dropouts earn to five times what they earn. Relative to high schoolers, the change has gone from two times to three times what they earn. Moreover, only college and postgraduates have seen a wage increase; the other groups have not. Clearly, the most change is in wages.

Table 36  
**Household size using OECD equivalence scales**

	1989	1992	1995	1998	2001	2004	2007	2010	2013
Dropouts	2.05	1.92	1.95	1.98	1.94	1.99	2.07	2.11	2.11
High school	2.03	2.01	2.01	2.00	1.99	1.96	2.00	1.96	1.97
Some college	2.04	1.96	1.94	1.98	1.93	1.96	1.90	1.99	1.92
College	2.10	1.97	1.94	1.94	1.99	1.94	1.99	1.95	1.94
Postgraduates	2.07	2.05	1.96	1.97	2.02	1.97	1.93	2.02	2.00

Table 37  
**Wages and hours by education**

	1989	1992	1995	1998	2001	2004	2007	2010	2013
Head's labor income from main job									
Dropout	24.6	20.1	22.6	29.0	24.6	25.1	23.6	29.4	20.8
High school	36.6	29.9	38.2	38.5	37.4	33.6	37.6	33.0	32.5
Some college	44.7	41.6	42.1	51.0	43.9	43.5	48.0	39.8	38.4
College	70.5	59.3	61.8	64.5	71.5	72.7	80.2	71.4	69.2
Postgraduate	82.2	80.2	95.1	100.9	114.4	118.6	123.4	131.2	118.2
Head's wage on main job									
Dropout	11.7	10.2	11.1	13.9	12.1	12.2	11.3	14.8	10.4
High school	16.1	13.3	17.0	17.8	17.0	15.4	17.0	15.6	15.4
Some college	19.1	18.7	18.7	22.2	20.1	20.4	21.5	19.0	18.5
College	30.8	25.5	26.3	28.1	31.3	33.1	34.8	32.6	31.4
Postgraduate	35.5	34.6	40.0	42.6	49.0	52.9	53.0	57.3	52.4
Head's hours on main job									
Dropout	2115	1980	2034	2077	2027	2061	2089	1992	1992
High school	2281	2252	2246	2168	2195	2191	2210	2115	2109
Some college	2347	2219	2247	2302	2187	2131	2225	2093	2077
College	2286	2327	2348	2295	2284	2196	2301	2189	2208
Postgraduate	2311	2318	2380	2370	2333	2242	2326	2289	2254

Notes: Labor income, wages, and hours for household head from main job for different educational attainment. We exclude households with zero hours worked. We compute wages as average labor income divided by average hours to reduce the effect of outliers on average wages.

Figure 14 provides a visual description of these changes. Panel (a) poses relative wages, panel (b) absolute wages. The figures speak for themselves.

### *Employment and Inequality*

Table 38 shows the employment partition. Over time, workers did below average in all variables, and the self-employed did above average. Nonworkers did very well in the slightly oxymoronic category of earnings (which actually refers to the earnings of other household members, or it can be a result of the household head not working at the time of the interview), but they did badly on wealth. The other group that did badly was that of disabled workers, who performed below average in both income and wealth. In absolute terms, all groups gained.

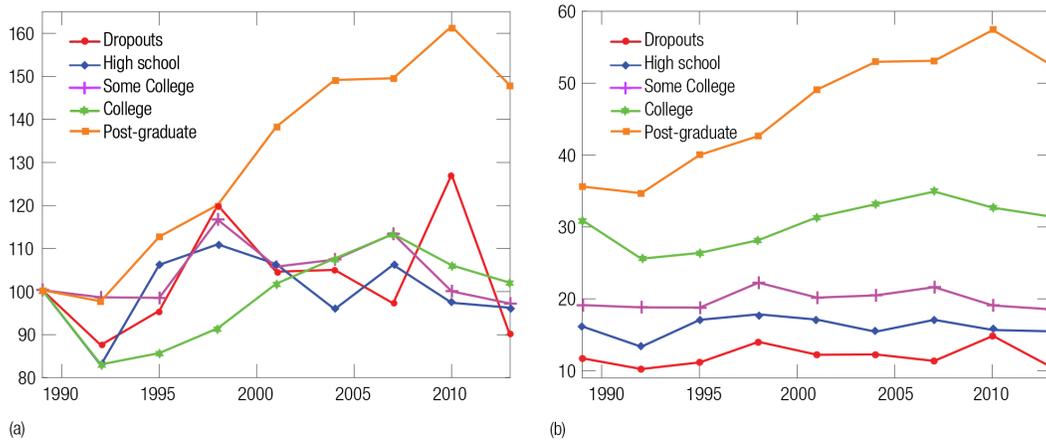


Figure 14. **Wages by education group.** Panel (a): wage index for education groups. Data are from Table 37 with all wages normalized to 100 in 1989. Panel (b): wage levels in 2013 dollars.

Table 38

**Employment partition growth performance**

	1989–2013		
	Earnings (%)	Income (%)	Wealth (%)
Workers	-4.1	-4.0	-6.1
Self-employed	7.2	7.4	18.7
Retired	-1.1	-2.4	-16.9
Nonworkers	41.0	19.1	-29.9
Disabled nonworkers	-21.9	-7.6	-43.2
Total	-3.7	-2.3	-3.6

Notes: Growth rate difference relative to counterfactual average growth rate. The counterfactual average growth rate is computed by fixing the distribution across the four major employment groups to 1989 and only changing the means of the employment groups. The row labeled "Total" reports the growth effect from the composition change.

**Marital status and Inequality**

Married households are the unambiguous winners within the marital status partition (see Table 39). All other groups did below average in all categories (except single males in wealth). The big losers are the singles with dependents, especially males. Females without dependents did above average in terms of earnings, showing the overall improvement of women over this period. That retired widows did so much worse with respect to earnings says more about the age composition of this group (today they are older) than about actual earnings, as we can see from the differential performance of the group’s earnings and income.

Table 39

**Marital status partition growth performance**

	1989–2013		
	Earnings (%)	Income (%)	Wealth (%)
Married	5.1	7.5	3.3
Single	-18.7	-21.9	-13.5
Single with dependents	-29.0	-25.2	-52.4
Male	-37.8	-33.0	-75.8
Female	-25.8	-22.7	-34.9
Single without dependents	-10.1	-20.1	3.9
Male	-19.5	-28.8	16.5
Female	-1.0	-12.6	-9.8
Retired widows (female)	-74.6	-21.4	-41.2
Total	-1.2	-1.1	-1.6

*Notes:* Growth rate difference relative to counterfactual average growth rate. The counterfactual average growth rate is computed by fixing the distribution across married and single households to 1989 and only changing the means of married and single households. The row labeled "Total" reports the growth effect from the composition change.

### ***The Effects of the Great Recession: Changes between 2007 and 2013***

How did the subgroups of the various partitions fare over the Great Recession? In Appendix B, we include the data for each partition for the SCF from 2007, 2010, and 2013, but here we simply look at a summary of the relative performance of each group. We abstract from the possible issues of misalignment of the aggregates in 2013 between the SCF and the other measures of income.

#### ***Age and Inequality***

Between 2007 and 2010, relative earnings growth was highest for those between 40 and 50, and lowest for the youngest and for those in their fifties (see Table 40). Interestingly, the group over 65 also increased their earnings more than the average, indicating the increase in average retirement age. With respect to wealth, we see the same picture: the young did much worse than the middle age, with the old in between. We see that the relative effects on earnings have been similar at the onset of the crisis (2007–2010) and during the small recovery (2010–2013). With respect to wealth, the picture is less sharp: the young did much worse than the old in the first phase, and they did better in the second phase.

#### ***Education and Inequality***

Changes in earnings and income between 2007 and 2010 are U-shaped over education groups (see Table 41). Dropouts and postgraduates did better in earnings than high schoolers and those with some or full college. The opposite happened in the last period, but overall there is a further improvement of the most educated over the least educated. The picture is similar, if less sharp, for income. With respect to wealth, again the most educated did best.

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Table 40

### Age partition growth performance

Age	2007–2010			2010–2013			2007–2013		
	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)
< 25	-9.2	1.1	-33.2	-6.2	-10.9	10.7	-14.3	-8.7	-27.2
26–30	-9.6	-3.2	-44.6	-6.2	-10.2	32.5	-14.6	-12.0	-31.2
31–35	0.6	4.2	-13.1	-3.6	-7.0	10.8	-2.9	-2.3	-5.4
36–40	-5.6	-2.3	-24.1	19.1	15.3	59.1	11.2	11.0	11.1
41–45	8.2	7.1	-9.8	15.6	10.4	33.9	23.8	17.3	14.9
46–50	4.0	4.3	10.8	-11.1	-9.4	-21.8	-7.1	-4.4	-9.9
51–55	-5.1	-3.7	-10.3	0.9	-5.2	5.0	-4.3	-8.3	-6.5
56–60	-5.7	-5.8	5.9	-7.4	-6.2	-16.8	-12.2	-11.2	-9.3
61–65	9.9	1.0	5.7	-13.8	-2.7	-11.3	-4.6	-1.4	-4.5
66+	8.5	-1.4	5.8	8.4	11.3	6.1	16.7	8.5	10.9
Total	-0.5	0.3	2.2	-1.7	-0.3	2.2	-2.1	0.1	3.9

*Notes:* Growth rate difference relative to counterfactual average growth rate. The counterfactual average growth rate is always computed by fixing the distribution across age groups in the initial period (2007 or 2010) and only changing the means of the age groups. The row labeled "Total" reports the growth effect from the composition change.

### Employment Status and Inequality

We should not expect many changes with regard to employment status, because the Great Recession is mostly about having fewer workers and more nonworkers. Yet, we see that the status of workers declined somewhat in the first subperiod and recovered in the second—the opposite of what happened to the self-employed (see Table 42). Over the whole period, the retired did worse than the average, and nonworkers did better.

Table 41

### Education partition growth performance

	2007–2010			2010–2013			2007–2013		
	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)
Dropouts	16.0	15.4	-8.7	-18.7	-18.1	-5.4	-4.7	-2.9	-12.2
High school	-4.2	2.9	-0.6	1.9	-2.8	-10.1	-1.9	0.8	-8.7
Some college	-4.2	-5.4	-11.8	-5.1	-3.3	12.8	-8.0	-7.8	-2.1
College	-5.2	-4.4	-6.9	8.9	10.5	7.2	3.0	4.6	-1.0
Postgraduate	9.5	3.4	12.5	-6.1	-4.8	-5.6	3.1	-0.7	6.9
Total	1.9	1.7	2.2	2.4	2.4	3.4	4.3	4.2	5.2

*Notes:* Growth rate difference relative to counterfactual average growth rate. The counterfactual average growth rate is computed by fixing the distribution across education groups to the initial period (2007 or 2010) and only changing the means of the education groups. The row labeled "Total" reports the growth effect from the composition change.

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Table 42

### Employment partition growth performance

	2007–2010			2010–2013			2007–2013		
	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)
Workers	4.6	7.0	-2.4	-5.0	-9.9	-5.7	0.1	-1.5	-6.8
Self-employed	-10.4	-15.0	0.8	14.6	26.7	10.7	2.3	4.7	10.2
Retired	-29.5	-9.0	0.6	14.2	4.3	-8.5	-19.8	-5.5	-6.1
Nonworkers	16.1	13.1	14.0	-3.4	-1.5	-12.1	12.7	12.9	3.3
Disabled nonworkers	9.9	11.2	2.9	-8.3	-7.4	4.2	1.6	5.0	7.0
Total	-1.3	-0.5	1.7	-3.5	-3.0	-4.8	-4.1	-2.6	-1.9

*Notes:* Growth rate difference relative to counterfactual average growth rate. The counterfactual average growth rate is computed by fixing the distribution across the four major employment groups to the initial period (2007 or 2010) and only changing the means of the employment groups. The row labeled "Total" reports the growth effect from the composition change.

Table 43

### Marital status partition growth performance

	2007–2010			2010–2013			2007–2013		
	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)	Earnings (%)	Income (%)	Wealth (%)
Married	0.3	-0.9	1.5	0.6	1.8	0.8	0.8	0.6	2.2
Single	-0.7	4.0	-6.0	-2.6	-6.2	-3.4	-3.1	-1.7	-8.7
Single w/dependents	-7.1	0.8	-6.1	-5.4	-7.9	-14.5	-11.5	-6.4	-17.6
Male	1.0	2.5	-3.4	-6.8	-8.7	3.5	-5.5	-5.5	-0.6
Female	-10.8	0.0	-7.4	-5.6	-8.1	-23.8	-15.1	-7.3	-26.0
Single w/o dependents	3.9	5.7	-6.7	0.1	-5.0	1.3	3.9	1.1	-5.8
Male	-6.2	-3.3	-11.1	5.5	-1.5	14.2	-1.2	-4.8	-0.6
Female	12.6	12.9	-4.0	-4.3	-7.3	-9.2	7.6	5.9	-11.5
Retired widows (female)	-0.7	19.1	6.2	-4.5	-14.4	-26.9	-4.9	4.1	-18.4
Total	-0.6	-0.5	-0.6	-0.9	-0.9	-0.9	-1.5	-1.4	-1.4

*Notes:* Growth rate difference relative to counterfactual average growth rate. The counterfactual average growth rate is computed by fixing the distribution across married and single households to the initial distribution (2007 or 2010) and only changing the means of married and single households. The row labeled "Total" reports the growth effect from the composition change.

### Marital Status and Inequality

Across marital status, no clear patterns are evident (see Table 43). The married, the largest group by far, fared about average for all variables. Among the singles, females without dependents did the best in earnings but not in wealth. Females with dependents did the worst.

### The Richest

Recently, there has been a revived interest in the concentration of income and wealth. Piketty (2014) provides an impressive and comprehensive overview of these facts for several countries over the last century. Based on SCF data, Tables 44 to 46 show the share of earnings, income, and net worth that correspond to various cuts of the richest households.<sup>23</sup> Because of its particular sampling scheme, the SCF is very well suited for studying the right tail of the distribution. See Bricker et al. (2015) for a thorough comparison of the SCF and administra-

Table 44

**Richest earnings households**

Top (%)	1989	1992	1995	1998	2001	2004	2007	2010	2013
1.000	13.87	15.36	15.73	16.13	18.33	16.52	18.66	18.03	18.83
0.500	10.05	11.44	11.77	11.97	13.29	12.49	13.74	12.8	13.43
0.100	4.42	6.33	5.97	5.70	5.85	6.12	6.54	5.61	6.40
0.010	1.74	3.54	2.41	1.65	1.53	1.65	1.92	1.74	2.43
0.005	1.35	2.45	1.82	1.09	0.94	1.13	1.43	1.28	1.73
0.001	1.01	0.49	0.59	0.46	0.36	0.47	0.62	0.58	0.55

Table 45

**Richest income households**

Top (%)	1989	1992	1995	1998	2001	2004	2007	2010	2013
1.000	17.09	18.59	16.71	17.39	20.91	16.94	20.97	17.20	19.68
0.500	13.35	13.59	12.89	13.10	15.99	12.97	15.87	12.42	14.86
0.100	7.02	6.31	6.95	6.13	8.25	6.24	7.84	5.64	8.07
0.010	2.69	3.01	3.35	1.80	1.89	1.83	2.86	1.89	2.84
0.005	1.94	2.07	2.28	1.34	1.17	1.22	2.04	1.41	1.87
0.001	0.96	0.42	0.91	0.58	0.48	0.51	0.79	0.62	0.72

Table 46

**Richest wealth households**

Top (%)	1989	1992	1995	1998	2001	2004	2007	2010	2013
1.000	29.92	30.04	34.85	33.87	32.17	33.23	33.56	34.07	35.47
0.500	22.51	22.48	27.30	25.53	23.27	24.41	24.77	25.36	26.54
0.100	10.49	11.19	13.11	12.53	10.47	11.63	12.35	12.26	13.17
0.010	3.88	3.92	3.97	4.16	3.23	3.57	3.90	4.16	4.38
0.005	2.72	2.81	2.63	2.86	2.09	2.36	2.61	2.93	3.04
0.001	0.73	1.04	0.95	1.16	0.71	0.80	0.85	1.02	1.20

tive tax data that emphasizes arguments in favor of using SCF data.

We now explore in detail the properties of the rich, the richest, and the superrich. We start by slicing the right tail of the data into very thin groups in order to explore how much those groups have (“Shares of the Rich and the Superrich”) and then go on to see in what dimensions the very rich are different from the rest (“Characteristics of the Richest Households”). We end with a discussion of the differences between how the rich show up in the SCF and in tax data (“Difference in Income Concentration between SCF and Tax Data”).

### ***Shares of the Rich and the Superrich***

The 1 percent earnings-richest households receive roughly every seventh dollar earned in 1989, with an upward trend to almost every fifth dollar in 2013. Still, inequality even among the earnings-richest 1 percent is substantial. The top half earn about two-thirds of earnings going to the top 1 percent. The top 10 percent of the top 1 percent still get about one-third, and

the top 1 percent of the top 1 percent get more than 10 percent of the earnings going to the top 1 percent. The SCF shows an increase in the share held by the richest. For the top 1 percent, the share decreased from 14 to 19 percent in the span of the sample. The same holds true for the shares of the top one per thousand and one per ten thousand. Excluding the share of the top one hundred thousand, this is such a small group (even with the oversampling of the rich) that we have to take these numbers with a grain of salt.

Income is somewhat more concentrated than earnings in the top 1 percent. Even within that 1 percent, income is also more concentrated than earnings. The passage of time has increased the share going to the top groups in a systematic way. The increase is less acute than that for earnings: the top 1 percent grab 2.5 percent more of total income instead of the 5 percent of total earnings that now go to the top 1 percent. The increase occurs for most of the top cuts except for the extreme top, above one in ten thousand, with the caveats mentioned before.

Tax data report income flows and as such cannot really address the question of wealth inequality.<sup>24,25</sup> The SCF does not face this limitation and allows us to study wealth concentration directly.

According to the SCF, the richest 1 percent have a much bigger share of wealth than of earnings or income; more than one-third of total wealth is in their hands. Moreover, within the top 1 percent, wealth is also highly concentrated, as Table 46 shows. The top 1 percent share has been constantly growing since 1989, going from less than 30 percent to more than 35 percent. An increasing concentration of wealth occurs no matter how thin we cut the upper tail of the distribution. The share has always grown (although we should repeat the caveats about the slices thinner than the top one in ten thousand). If we look at the share of wealth of the top 10 percent, we see that it has also increased over time: from 67 percent in 1989 to 75 percent in 2013.

### ***Characteristics of the Richest Households***

Are the rich like the rest of us? The SCF can tell because it reports household characteristics such as age, education, employment, and marital status. Table 47 shows how the population at large and various notions of the rich distribute themselves among the main age, education, employment, and marital status groups.

Clearly, the rich are not like the rest of us. The earnings-rich are mostly middle age, and the income- and wealth-rich are older. As we move closer to the right tail of the distribution for the very rich, we see that they get older. The rich are much more educated than the population at large.<sup>26</sup> For instance, the top two education groups are less than 40 percent of the population but 80 percent of the earnings-richest 10 percent. Among the superrich, the top two education groups climb to 90 percent for income and earnings. Although there are households with some college (i.e., less than a full degree among the rich), there are very few that are high schoolers and almost none that are dropouts. The key employment occupation of the very rich is self-employment, the more so as we move closer to the right tail of the distribution for the very rich, which explains the large share of business wealth of the richest households. These numbers suggest that entrepreneurial activity and effort to run a successful business puts households at the top of the distribution. The families of the various rich groups look very similar to each other. They are preponderantly married, and despite being older, they have a similar number of children as the population at large.

Table 47

**Characteristics of the top earnings, income, and wealth households in 2013**

	≤ 30	31–40	41–50	51–60	≥ 61	DR	HS	SC	CO	PG	WKR	SE	RET	NW	MAR	KIDS
All households																
	13.5	17.2	18.6	19.9	30.7	11.0	31.3	18.9	26.3	12.5	56.9	9.7	20.8	12.6	57.2	57.0
Top 10 percent																
Earnings	1.9	21.3	29.7	30.4	16.7	0.6	10.4	9.3	41.7	38.1	71.4	22.4	2.8	3.4	91.8	39.6
Income	1.8	15.7	24.9	28.5	29.1	0.5	9.2	9.1	39.4	41.8	62.1	24.6	9.5	3.7	90.7	47.7
Wealth	0.4	6.0	16.5	28.9	48.2	0.9	9.2	12.9	37.4	39.6	41.0	31.5	25.0	2.5	83.0	64.5
Top 1 percent																
Earnings	0.5	9.1	31.1	34.0	25.4	0.0	2.8	5.6	38.4	53.2	45.0	48.8	5.9	0.2	84.6	38.3
Income	0.0	8.7	28.7	30.6	32.0	0.0	3.1	8.9	35.9	52.1	40.5	49.0	10.2	0.2	84.0	45.3
Wealth	0.8	4.2	11.6	25.3	58.1	0.3	7.4	12.4	33.2	46.7	17.4	59.5	20.0	3.1	88.3	67.3
Top 0.1 percent																
Earnings	0.0	9.2	19.7	46.5	24.6	0.1	4.0	4.2	32.3	59.3	29.4	66.4	4.2	0.0	95.6	51.4
Income	0.0	8.3	23.0	34.4	34.3	0.3	2.8	4.7	40.6	51.7	15.7	72.5	11.8	0.0	95.8	45.3
Wealth	0.0	4.5	13.5	26.9	55.1	0.5	1.4	7.8	40.2	50.1	19.3	60.1	20.6	0.0	89.1	56.6

*Notes:* Age, education, employment, and family characteristics of households in the top of the earnings, income, and wealth distribution. The rows indicate the considered distribution. The top panel of the table looks at the top 10 percent of each distribution, the middle panel at the top 1 percent, and the bottom panel at the top 0.1 percent. The first five columns show the distribution across age groups, the next five columns show the distribution across education groups (dropouts, high school, some college, college, postgraduate), the next four columns show occupation groups (workers, self-employed, retired, nonworkers), and the last two columns show the share of married households and the share of households with children. We report percentage points of households for each household characteristic.

### ***Difference in Income Concentration between SCF and Tax Data***

How well does the SCF income concentration compare with other sources? Figure 15 shows the evolution of income concentration over time and compares it with the data reported in Piketty (2014). The levels of the data series match very closely. The data in Piketty (2014), however, seem to show an upward trend for income concentration. The income share of the top 10 percent fluctuates around 45 percent in the SCF, but in the data of Piketty (2014) between 1989 and 2013, it increases from 40 percent to over 50 percent.

One reason that could explain the difference in income concentration is that the IRS tax data sample is a sample of tax units and not households, and therefore constitutes a sample of tax units that file taxes rather than a representative sample of U.S. households. The increased importance of tax-exempt benefits might also account for the diverging trends. Bricker et al. (2015) provide a thorough and detailed investigation of the differences between the SCF and the IRS data. They conclude that the IRS data likely overstate the trends of income concentration at the top. We refer the interested reader to this paper.

To explore other possible reasons why the tax data and the SCF data show slightly different trends in income concentration, we decompose the contribution of different subgroups to the increase of the income share of the top 1 percent since 1988. The subgroups that we look at are the bottom half, the next forty, the next nine, and the top 1 percent of the top 1 percent.

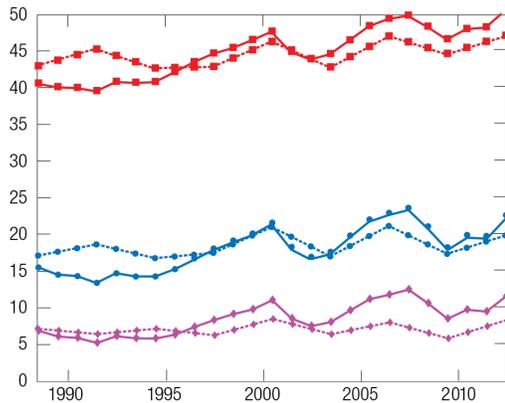


Figure 15. **Comparison of top income shares between 2013 SCF and data from Piketty (2014).** Solid lines are from Piketty (2014), dashed lines are from the SCF. Red: top 10 percent; blue: top 1 percent; pink: top 0.1 percent. Data from Piketty (2014) are from Table S8.2. Data that are in between survey years from the SCF are linearly interpolated.

Table 48

**Relative contribution to increase of income concentration in top 1 percent**

Group	2000 (%)	2004 (%)	2007 (%)	2012 (%)
99–99.5	11.02	14.30	9.83	12.10
99.5–99.9	21.33	23.11	21.81	22.95
99.9–99.99	30.98	27.86	28.75	27.54
99.99–100	36.67	34.73	39.62	37.42

Table 48 shows the contribution of each group of households to the increase in the income of the top 1 percent for selected years. As we can see, the contribution of the increase in income is extremely concentrated at the very top, a group that amounts to about 16,000 tax units in the United States (recall that there are 122 million households in 2013). The reason for the different trends might therefore be that the SCF does not provide less accurate coverage of these households. This is particularly possible if we note that the sampling scheme of the SCF excludes the richest 400 U.S. households (the so-called Forbes 400) and some single households from the data if there is a risk of identification of individual records.

## Decomposition of Inequality

Which of the components of wealth or income are the most important to determine overall inequality? Lerman and Yitzhaki (1985) provide a highly intuitive approach in order to answer this question. They propose using as the contribution of each component (say, of each type of asset) of a variable (say, wealth) the product of three objects: the within-component inequality (actually the component-specific Gini), the share of the component in the overall variable, and

the correlation of the component with the overall variable. We use this technique to decompose the sources of wealth and income inequality.

### **Wealth Inequality**

Table 49 shows the contribution to the Gini coefficient of wealth for the 2013 SCF for each of the household portfolio components listed in Figure 7. The key column in the list is labeled “Contrib. Share” ( $I_k / G$ ) and is the percentage contribution of each asset class to the wealth Gini coefficient  $G$ . We report the absolute contribution in the column labeled “Contrib. Level” ( $I_k$ ). Note that adding up this column ( $I_k$ ) yields the overall Gini coefficient  $G$ . The absolute contribution to the Gini ( $I_k$ ) is the product of the share of wealth of each component (Share  $S_k$ ), the Gini coefficient of that component (Coeff.  $G_k$ ), and the correlation of the component and total wealth (Corr.  $R_k$ ). This formula tells us that components that are held very unequally but are small overall can be of only minor importance in accounting for wealth inequality, even if they are very unequally distributed. This applies, for example, to stocks. We decompose wealth as before, according to the schematic portfolio in Figure 7.

In line with the large share of business wealth of the rich, the single most important asset is business wealth, accounting for 23 percent of the wealth Gini. The second most important asset class is houses (21 percent of the Gini). Houses are associated with mortgage debt in many cases. If we consider the contribution of mortgage debt and home equity lines of credit (HELOCs), we find that they account for a negative 5 percent of the Gini (in fact, debt contributes negatively to the Gini coefficient).<sup>27</sup> Taken together, houses and debt yield home equity, which still accounts for 16 percent of the wealth Gini, an amount similar to retirement accounts (17 percent of the wealth Gini). The contribution of financial investments such as stocks, bonds, and mutual funds is 18 percent of the Gini, a little above their 16 percent share of wealth. The fact that these financial investments are only a relatively small fraction of households’ balance sheets also explains why they contribute relatively little to wealth inequality despite their enormous component-specific Ginis.

The Gini coefficients within asset classes ( $G_k$ ) show that, except for houses (0.68) and vehicles (0.54), all assets are highly unequally distributed, with Gini coefficients regularly exceeding 0.95. Across asset classes, the correlation with overall wealth is positive ( $R_k$ ).

The reason why houses have relatively low correlation with wealth (0.56) might be because access to mortgages allows wealth-poor but earnings-rich households to own a high-value house. This assumption is in line with the substantial negative correlation of mortgages (−0.77), which implies that high-wealth households also hold bigger mortgages. Indeed, if the correlation were −1, then mortgages would increase monotonically with wealth. Financial investments such as stocks, bonds, and mutual funds, on the other hand, are probably rarely bought using credit and therefore show a very large positive correlation with wealth.

Two lessons can be learned from this decomposition: the wealthy have a lot of debt, and the importance of housing and business wealth may be the reason behind the low correlation of wealth and capital income.

Often, high-wealth portfolios also contain a lot of debt, as can be seen from the negative

Table 49  
Sources of wealth inequality, 2013

Wealth component	Share $S_k$	Coeff. $G_k$	Corr. $R_k$	Conc. $C_k$	Contrib. level $I_k$	Contrib. share $I_k / G$
Liquid assets	0.06	0.87	0.89	0.77	0.05	0.06
CDs	0.01	0.98	0.78	0.76	0.01	0.01
Mutual funds	0.07	0.98	0.95	0.94	0.07	0.08
Stocks	0.07	0.98	0.95	0.93	0.07	0.08
Bonds	0.02	1.00	0.97	0.97	0.02	0.02
Savings bonds	0.00	0.98	0.67	0.66	0.00	0.00
Other managed assets	0.04	0.99	0.92	0.91	0.03	0.04
Cash value life insurance	0.01	0.96	0.79	0.76	0.01	0.01
Other financial assets	0.01	0.99	0.82	0.81	0.01	0.01
Retirement accounts	0.19	0.87	0.90	0.78	0.15	0.17
Houses	0.32	0.68	0.83	0.56	0.18	0.21
Vehicles	0.04	0.54	0.57	0.31	0.01	0.01
Other residential RE	0.08	0.96	0.87	0.83	0.07	0.08
Nonresidential RE	0.04	1.00	0.89	0.89	0.03	0.04
Business	0.21	0.99	0.96	0.95	0.20	0.23
Other nonfinancial assets	0.01	0.99	0.85	0.84	0.01	0.01
Mortgages + HELOCs	-0.13	-0.77	-0.43	0.33	-0.04	-0.05
Residential debt	-0.02	-0.98	-0.67	0.65	-0.01	-0.01
Other lines of credit	0.00	-1.00	-0.68	0.68	0.00	0.00
Credit cards	0.00	-0.87	-0.02	0.02	0.00	0.00
Installment loans	-0.02	-0.80	0.27	-0.22	0.00	0.01
Other debt	0.00	-0.99	-0.41	0.41	0.00	0.00
.....						
Total	1.0	0.85	1.0	0.85	0.85	1.0

Notes:  $R_k$  is the correlation between each wealth component and wealth,  $G_k$  is the Gini of each wealth component, and  $S_k$  is each wealth component share of wealth.  $I_k$  is the share contribution to the overall Gini of the wealth component and is derived as  $I_k = R_k \times G_k \times S_k$  and satisfies  $G = \sum_k I_k$ . We also report a concentration measure  $C_k = G_k \times R_k$ . We use the following abbreviations: CDs for certificates of deposit, RE for real estate, and HELOCs for home equity lines of credit.

correlation  $R_k$ . This finding seems challenging from an economic theory point of view because households that are wealthy are also the households that hold the most debt. During the housing boom of the 2000s, perhaps the households that increased their debt the most were the wealthiest households rather than the poorest households. For some supporting evidence, see the work of Kuhn, Schularick, and Steins (2015), who provide a detailed analysis of the debt dynamics of U.S. households during the postwar period.

Business wealth and home equity are wealth categories that provide highly idiosyncratic returns. Owner-occupied houses may provide a financial return, but more often than not, they provide nonpecuniary returns. Given that these two assets are the most important components of wealth, the low value of the correlation between capital income and wealth in Table 19 (0.32) is likely to be due not to poor measurement of capital income but to the nature of the major components of wealth.

### *Life-Cycle Wealth Decomposition*

Some of the inequality arising from houses and retirement accounts may be simply due to life-cycle motives. Table 50 decomposes wealth inequality by major wealth component for the

subsets of the population with a household head younger than 35 years and between 55 and 64 years of age. The young have a much higher Gini, which is mostly accounted for by houses (even when counting them net of mortgages) and business wealth. We also added installment loans to the decomposition because they are an important component to use in explaining inequality among young households. Among the young, two-thirds of installment loans are student loans, which account for a substantial fraction of wealth (negative 24 percent) and contribute *positively* to wealth inequality, 8 percent. This is in contrast to the average household, in which installment loans have a negligible effect of less than 1 percent. Installment loans, unlike other debt classes, contribute positively to the wealth Gini because wealth-poor households hold large amounts of installment loans. For older households, the most important items are retirement accounts and business wealth.

Table 50

**Life-cycle variation in wealth inequality decomposition**

	< 35		55–64	
	Share $S_k$	Contrib. <i>share</i> $I_k / G$	Share $S_k$	Contrib. <i>share</i> $I_k / G$
Houses	0.79	0.43	0.28	0.18
Mortgages and HELOCs	-0.54	-0.23	-0.10	-0.03
Retirement accounts	0.15	0.10	0.21	0.19
Business wealth	0.27	0.26	0.20	0.23
Installment loans	-0.24	0.08	-0.01	0.00
Gini	1.0145		0.8154	

*Evolution of the Contributors to Wealth Inequality*

Table 51 reports the relative contribution of the different asset classes to wealth inequality over time ( $I_k / G$ ). The total contribution of financial assets such as CDs, mutual funds, bonds, and stocks has remained roughly constant. Within financial assets, the composition has changed: in 1989 bonds and CDs accounted for 7 percent of wealth inequality and mutual funds accounted for 2 percent; in 2013 mutual funds accounted for almost 8 percent of inequality, and bonds and CDs accounted for 2.5 percent. At the end of the 1990s, after the stock market boom, stocks had gained in importance, accounting for 12.5 percent of the Gini in 1998. In 2013, stocks returned to a contribution of 8 percent, highly comparable to the level of 6 percent in 1989. A second large change occurred for retirement accounts (which went from 7 to 17 percent) and nonresidential real estate (which went from 10 to 3 percent).<sup>28</sup> The effect of mortgages has remained almost unchanged at about 5 percent. The contribution of houses, although showing no trend, has been volatile (from 25 percent to 21 to 25 and back to 21 percent).

In summary, wealth inequality is not driven by some households holding the vast majority of some assets such as stocks but rather by the bulk of assets. As a consequence, it is houses, businesses, and retirement accounts that shape wealth inequality.

Table 51

**Shares of the contribution to wealth inequality  $I_k/G$  over time**

	1989	1992	1995	1998	2001	2004	2007	2010	2013
Liquid assets	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.06	0.06
CDs	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.01
Mutual funds	0.02	0.03	0.06	0.06	0.06	0.07	0.07	0.08	0.07
Stocks	0.06	0.07	0.08	0.12	0.12	0.08	0.08	0.07	0.08
Bonds	0.04	0.04	0.03	0.02	0.03	0.03	0.02	0.02	0.02
Other managed assets	0.03	0.02	0.03	0.05	0.06	0.04	0.03	0.03	0.04
Cash value life insurance	0.02	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.01
Other financial assets	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Retirement accounts	0.07	0.09	0.11	0.12	0.13	0.13	0.13	0.16	0.17
Houses	0.25	0.26	0.22	0.21	0.21	0.26	0.25	0.22	0.21
Vehicles	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
Other residential RE	0.06	0.07	0.06	0.06	0.05	0.08	0.09	0.08	0.08
Nonresidential RE	0.10	0.10	0.07	0.06	0.06	0.06	0.05	0.05	0.04
Business	0.25	0.25	0.25	0.24	0.22	0.22	0.26	0.24	0.23
Other nonfinancial assets	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Mortgages + HELOCs	-0.04	-0.06	-0.05	-0.05	-0.05	-0.06	-0.06	-0.05	-0.05
Residential debt	-0.01	-0.02	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.01

**Income Inequality**

If we apply the same techniques to the decomposition of the income Gini, what we obtain is reported in Table 52. More than 60 percent is due to labor income, and business income accounts for another 19 percent. Capital income accounts for 13 percent, yet it is the most unequally distributed income source with a Gini index of 1.02. Transfers and other income account for over 15 percent as a share of income but account for only 3.5 percent of income inequality. The reason is that transfers and other income have a small correlation with total income (0.23 and 0.47). Although labor income has the smallest Gini coefficient within income classes, its value is still larger than that of total income. The diversification of income sources leads to a reduction in income inequality rather than to an increase in inequality.

Table 53 decomposes the contributions to the income Gini for households with a head younger than 35 years and between 55 and 64 years of age. For the young, most of the Gini arises from labor income. For the older group, labor income is still the main contributor (56 percent), but there are sizable contributions from business income (20 percent) and capital income (18 percent of income). Transfers and other income have a modest contribution to the Gini.

Table 54 reports the relative contribution of the different income sources to income inequality over time ( $I_k / G$ ). No trends are noted, just some volatility in the contribution of capital income.

**Conclusions**

We have documented properties of interest to macroeconomists of the earnings, income, and wealth distributions in the United States in 2013 and their evolution over the past quarter century. We have used high-quality microdata from the Survey of Consumer Finances, which, as we have shown, are broadly consistent with data from the national income and product accounts when aggregated to the level of the macroeconomy. We hope that the tables we have constructed, as well as their organization, prove useful.

The main property that we have uncovered is that “the poor” is a somewhat elusive term,

Table 52  
Sources of income inequality, 2013

Asset class	Share $S_k$	Coeff. $G_k$	Corr. $R_k$	Conc. $C_k$	Contrib. level $I_k$	Contrib. share $I_k/G$
Labor	0.62	0.65	0.88	0.57	0.36	0.62
Capital	0.08	1.02	0.90	0.92	0.07	0.13
Business	0.13	1.00	0.83	0.83	0.11	0.19
Transfer	0.14	0.76	0.23	0.17	0.02	0.04
Other	0.02	0.99	0.47	0.46	0.01	0.02
Total	1.00	1.00	0.58	1.00	0.58	1.00

Notes:  $R_k$  is the Gini correlation between the income source and total income,  $G_k$  is the relative Gini of each income source,  $S_k$  is the income source's share of total income,  $I_k$  is the share in percentage points of inequality accounted for by the income source and is derived as  $I_k = R_k \times G_k \times S_k$ , where  $G$  is the Gini coefficient of total income that can be computed as  $G = R_k \times G_k \times S_k$ . The concentration measure  $C_k = G_k \times R_k$ .

Table 53  
Life-cycle variation in income inequality decomposition

	< 35		55–64	
	Share $S_k$	Contrib. share $I_k/G$	Share $S_k$	Contrib. share $I_k/G$
Labor	0.86	0.90	0.59	0.56
Capital	0.01	0.03	0.12	0.18
Business	0.06	0.09	0.15	0.20
Transfer	0.04	–0.02	0.12	0.03
Other	0.04	0.00	0.02	0.0
		0.45		0.61

Table 54  
Relative contribution to income inequality  $I_k/G$  over time

	1989	1992	1995	1998	2001	2004	2007	2010	2013
Labor	0.63	0.58	0.69	0.65	0.65	0.69	0.62	0.69	0.62
Capital	0.18	0.09	0.12	0.13	0.16	0.11	0.16	0.09	0.13
Business	0.18	0.21	0.18	0.21	0.17	0.17	0.20	0.19	0.19
Transfer	–0.00	–0.00	0.00	0.00	–0.00	0.02	0.02	0.02	0.04
Other	0.03	0.12	0.01	0.01	0.01	0.00	0.00	0.01	0.02

because being poor in earnings, income, or wealth does not mean the same thing. However, “the rich” is a much more uniform group, because those with a high value in one of the variables tend to have high values in the other ones as well. We have also documented a substantial increase in wealth inequality, a modest increase in earnings inequality, and only a weak increase in income inequality. When we look at the correlation between wealth and income, we find that it is weak—not only because most wealth is business wealth and home equity but also because returns are heterogeneous. In this way, this finding scrutinizes the direct link from wealth inequality to income inequality.

Business wealth and business income are the main drivers of wealth and income inequality. These sources account for about 20 percent of wealth and income inequality.

Therefore, when accounting for wealth inequality, business wealth is more important than financial assets (including stocks and bonds); for income inequality, business income is more important than capital income. Even for the richest households, capital income accounts for less than one-third of income.

Households with postgraduate education experienced the strongest increase in labor income over the past 25 years. These households are also the ones that reduced their working time the least amount during this period. Assortative mating between postgraduates further exacerbates earnings and income inequality at the household level.

The financial crisis disproportionately hit households in the lower part of the earnings, income, and wealth distribution. The public safety net gained in relevance during the crisis: today, transfer income constitutes the largest share of income compared with the shares over the past 25 years.

## Appendix A: Definitions

### *Variable Definitions*

The SCF is a household survey. Here, we provide the household definition from the SCF and the definitions for earnings, income, and wealth as used in our article.

**Earnings.** We define labor earnings as wages and salaries of all kinds, plus a fraction of business income. Business income includes income from professional practices, businesses, and farm sources. The value for the fraction of business and farm income that we impute to labor earnings is the sample-wide ratio of unambiguous labor income (wages plus salaries) to the sum of unambiguous labor income and unambiguous capital income. This ratio is 0.886 for the 2013 SCF sample (it was 0.934 for the 2010 SCF sample and 0.863 for the 2007 SCF sample).

**Households.** Households are the primary economic units of the SCF. A primary economic unit is a person or a couple who live together and all the other people who live in the same household who are financially dependent on them. For example, underage children and, in some circumstances, older relatives are considered dependents. A financially independent person who lives in the same dwelling, such as a roommate or a brother-in-law, is not considered to be a member of the same economic unit. We also follow the SCF convention to determine who is the head of the household. The SCF considers the male of a couple to be the head of the household in every case. In single households, the financially independent person of either sex is considered to be the head of the household.

**Income.** Income consists of all kinds of revenue before taxes. Hence, our definition of income includes both government and private transfers. Specifically, the sources of income that we consider are the following: wages and salaries; both positive and negative income from professional practices, businesses, and farm sources; interest income, dividends, gains or losses from the sale of stocks, bonds, and real estate; rent, trust income, and royalties from any other investments or business; unemployment and worker compensation; child support and

alimony; Aid to Dependent Children, Aid to Families with Dependent Children, food stamps, and other forms of welfare and assistance; income from Social Security and other pensions, annuities, compensation for disabilities, and retirement programs; income from all other sources including settlements, prizes, scholarships and grants, inheritances, gifts, and so on. In other words, the notion of income that we use attempts to include all before-tax income received during the year. It approximately corresponds to the payments to the factors of production owned by the household plus transfers. However, it does not include the income imputed from the services of some assets such as owner-occupied housing (see Slesnick 1992, 1993 for details).

**Wealth.** Wealth is the net worth of households. Our definition includes the value of financial and real assets of all kinds net of various kinds of debts. Specifically, the assets that we consider are the following: residences and other real estate; farms and all other businesses; checking accounts, certificates of deposit, and other banking accounts; IRA/Keogh accounts, money market accounts, mutual funds, bonds and stocks, cash and call money at the stock brokerage, and all annuities, trusts, and managed investment accounts; vehicles; the cash value of term life insurance policies and other policies; money owed to friends, relatives, businesses, and others; pension plans accumulated in accounts; and other assets. The debts that we consider are housing debts, such as mortgages, home equity, and HELOCs; other residential property debts, such as those derived from land contracts and vacation residences; credit card debts; installment loans; loans taken against pensions; loans taken against life insurance; margin loans and other miscellaneous debts.<sup>29</sup>

### Technical Definitions

**Histogram.** A histogram is a graphic with tabular frequencies, shown as adjacent rectangles, erected over discrete intervals (bins), with an area equal to the frequency of the observations in the interval.

**Kernel density estimator.** The kernel density estimator of a data set  $\{x_i\}_{i=1}^n$  is given by

$$\hat{f}_\lambda(x) = \frac{1}{n\lambda} \sum_{i=1}^n K\left(\frac{x-x_i}{\lambda}\right).$$

The parameter  $\lambda$  is the bandwidth of the kernel and controls how closely the fitted curve conforms to the true data. Higher values of  $\lambda$  result in smoother kernels, and lower values of  $\lambda$  result in estimates that are closer to the data.

**Quantile.** Quantiles are values that separate fractions of the population; that is, the quantile 20 is the value that makes 20 percent of the sample have less and 80 percent have more. The 0 and 100 quantiles are the minimum and maximum values, respectively.

**Skewness.** Skewness is a measure of the asymmetry of a distribution. Its value can be positive or negative, the latter indicating that the tail on the left side is longer than the right side and that the bulk of the values (including the median) lie to the right of the mean.

## **Appendix B: Additional Results**

In the main part of the text, we discuss how households in the age, education, employment status, and marital status partitions fare over time. In the first section of Appendix B, we provide the detailed tables that underlie our discussion on long-run trends in the main part of the text. The second section provides the results that underlie the effects of the Great Recession. Additional results, including results for all years of the age, education, employment status, and marital status partitions, are provided at Moritz Kuhn, “U.S. Earnings, Income, and Wealth Distribution,” <https://sites.google.com/site/kuhnecon/home/us-inequality>.

### ***Detailed Results on Long-Run Trends: Changes between 1989 and 2013***

This section provides detailed results on the long-run trends in the age (Table B1), education (Table B2), employment status (Table B3), and marital status partitions (Table B4).

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Table B1  
Age partition

Age	Averages			Income sources (%)					Gini indexes			Coeff. of var.				
	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	H(%) <sup>i</sup>	Size <sup>j</sup>
1989																
< 25	26.9	33.3	47.8	78.1	7.5	3.3	4.4	6.7	.50	.45	.96	.93	1.06	10.97	7.5	2.74
26-30	45.7	50.5	92.2	86.9	4.8	4.2	3.0	1.2	.41	.40	.83	.78	.77	2.76	10.5	2.86
31-35	66.6	70.6	122.3	90.9	2.2	4.1	2.1	0.7	.43	.41	.75	.98	.99	3.55	12.3	3.42
36-40	87.4	95.1	244.0	81.1	3.6	12.7	1.9	0.7	.46	.46	.75	7.37	8.25	6.62	11.0	3.21
41-45	85.4	95.7	360.8	79.7	4.0	11.3	2.4	2.6	.47	.46	.71	1.32	1.40	4.10	10.1	3.52
46-50	86.6	117.3	496.0	63.7	16.6	12.0	3.2	4.5	.51	.57	.76	1.56	4.52	4.87	7.3	3.14
51-55	87.2	100.3	516.8	77.4	7.4	11.3	2.6	1.4	.51	.52	.72	1.32	1.62	3.70	7.9	2.83
56-60	65.6	96.0	488.3	55.9	19.5	14.6	6.4	3.6	.61	.61	.75	2.29	2.86	4.02	6.4	2.35
61-65	46.8	76.3	620.4	53.4	17.4	9.4	18.8	1.2	.77	.62	.74	7.77	5.80	4.94	7.0	2.15
66+	16.0	59.0	493.2	12.6	29.8	17.1	36.6	3.9	.94	.64	.77	8.73	4.14	5.25	20.2	1.71
Total	57.0	76.4	342.3	65.4	11.9	11.0	9.3	2.4	.61	.55	.79	4.47	4.61	5.51	100	2.73
2001																
< 25	34.3	36.6	57.1	92.3	3.3	1.6	1.6	1.1	.44	.44	1.00	.86	1.02	9.67	7.1	2.34
26-30	58.6	62.4	115.5	90.2	3.0	4.3	1.5	0.9	.40	.40	.83	.94	1.02	4.42	8.6	2.82
31-35	75.8	82.8	188.7	87.4	5.3	4.8	1.5	1.0	.45	.46	.80	1.77	1.82	5.21	8.8	3.17
36-40	86.8	94.4	277.9	84.5	4.4	8.6	1.3	1.2	.49	.49	.77	2.30	2.41	4.92	10.6	3.35
41-45	99.2	108.7	419.8	83.7	5.2	8.7	1.2	1.1	.51	.52	.75	1.61	2.13	3.63	12.2	3.10
46-50	102.5	112.8	575.8	78.2	4.2	14.7	1.9	1.1	.55	.53	.77	2.23	2.70	4.24	11.2	2.88
51-55	119.5	161.3	848.6	63.2	21.8	12.7	2.0	0.4	.58	.64	.78	2.46	4.31	4.71	8.7	2.49
56-60	108.1	137.9	1027.3	64.0	13.8	16.7	4.4	1.1	.62	.64	.78	2.91	3.77	3.96	7.0	2.17
61-65	62.0	95.0	843.8	51.7	14.0	15.7	16.9	1.6	.76	.63	.78	4.89	3.89	4.58	5.7	2.03
66+	20.1	60.9	757.5	20.1	21.5	15.0	41.7	1.7	.89	.58	.75	9.70	4.86	4.89	20.1	1.69
Total	72.5	92.5	522	68.5	10.9	11.4	8.1	1.1	.62	.57	.81	2.88	3.63	5.25	100	2.57
2013																
< 25	22.4	26.3	26.7	84.0	0.4	1.5	4.3	9.9	.52	.41	1.31	1.06	.86	13.15	6.2	2.40
26-30	45.0	49.0	67.3	87.8	0.4	4.6	4.1	3.1	.44	.39	1.03	.89	.82	6.21	7.4	2.72
31-35	66.3	71.3	132.5	86.8	2.0	6.9	2.6	1.7	.45	.42	.88	1.10	1.13	4.80	8.8	3.23
36-40	86.4	95.7	289.1	81.0	2.9	10.5	2.9	2.7	.56	.53	.86	2.97	3.54	10.20	8.4	3.59
41-45	100.2	109.1	432.3	73.3	2.5	20.8	2.2	1.1	.57	.56	.87	2.69	2.88	5.21	9.1	3.31
46-50	85.7	99.9	474.1	74.8	6.6	12.4	4.1	2.1	.54	.53	.83	1.89	2.38	6.80	9.5	2.99
51-55	97.2	112.6	665.5	74.0	5.1	13.9	5.5	1.6	.63	.60	.83	4.31	4.26	8.10	10.1	2.63
56-60	84.0	108.0	744.6	64.2	9.3	15.4	9.0	2.2	.63	.60	.80	3.50	4.87	4.62	9.8	2.22
61-65	65.5	108.0	892.1	47.5	15.7	14.9	18.6	3.3	.71	.61	.82	4.14	5.39	5.09	8.8	2.10
66+	23.0	72.8	831.3	21.1	16.4	11.8	48.6	2.2	.91	.61	.79	7.69	4.69	5.57	22.0	1.77
Total	63.9	86.4	528.2	62.5	8.0	13.0	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup>Earnings; <sup>b</sup>income; <sup>c</sup>wealth; <sup>d</sup>labor; <sup>e</sup>capital; <sup>f</sup>business; <sup>g</sup>transfers; <sup>h</sup>other; <sup>i</sup>percentage number of households per group; <sup>j</sup>average number of persons per primary economic unit.

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Table B2  
Education partition

Education	Averages			Income sources (%)					Gini indexes			Coeff. of var.				
	E	Y	W	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	H(%) <sup>i</sup>	Size <sup>j</sup>
1989																
Dropouts	21.5	35.4	150.4	56.1	8.6	5.4	28.5	1.5	.72	.48	.76	1.81	1.27	10.88	24.3	2.73
High school	44.3	55.6	203.5	75.7	6.4	4.7	11	2.2	.55	.45	.75	1.31	1.20	3.59	32.1	2.7
Some college	60.8	76.0	337	72.9	9.0	8.4	7.7	2.0	.54	.48	.78	1.61	1.92	4.44	15.6	2.71
College	88.6	122.8	541.6	61.5	18.0	12.6	4.5	3.4	.51	.55	.78	1.97	3.39	5.18	19.4	2.78
Postgraduate	127.7	166.0	966.8	58.3	12.9	22.1	4.8	1.9	.55	.51	.71	6.31	5.96	3.18	8.5	2.76
Total	57	76.4	342.3	65.4	11.9	11	9.3	2.4	.61	.55	.79	4.47	4.61	5.51	100	2.73
2001																
Dropouts	22.5	33.4	138.4	61.6	2.0	6.8	28.1	1.5	.71	.49	.79	1.98	1.43	5.76	16.0	2.49
High school	48.4	58.9	238.0	75.6	4.0	7.6	11.9	1.0	.55	.44	.74	1.7	1.55	4.11	31.7	2.61
Some college	60.0	73.2	368.9	75.0	6.5	8.1	8.9	1.6	.53	.46	.77	2.86	2.87	5.11	18.3	2.49
College	101.4	124.5	815.0	72.0	10.3	10.9	5.4	1.4	.54	.52	.78	2.69	2.84	4.49	23.3	2.59
Postgraduate	177.6	244.7	1566.6	57.5	20.6	17.4	3.9	0.5	.60	.62	.73	2.21	3.28	3.47	10.6	2.64
Total	72.5	92.5	522	68.5	10.9	11.4	8.1	1.1	.62	.57	.81	2.88	3.63	5.25	100	2.57
2013																
Dropouts	18.5	29.8	107.7	58.0	1.5	4.6	33.7	2.3	.68	.40	.80	1.89	1.28	11.75	11.0	2.81
High school	36.4	50.5	199.7	65.3	2.5	7.7	22.7	1.8	.60	.43	.79	1.67	1.83	6.69	31.3	2.57
Some college	44.0	60.9	318.1	62.8	3.3	10.6	18.9	4.3	.61	.49	.86	2.11	2.21	6.86	18.9	2.48
College	88.1	114.8	714.9	63.8	9.9	14.5	9.4	2.3	.60	.55	.82	3.05	4.26	6.23	26.3	2.53
Postgraduate	152.0	205.1	1647.6	59.4	12.1	16.5	10.2	1.7	.63	.58	.77	3.33	3.35	4.16	12.5	2.63
Total	63.9	86.4	528.2	62.5	8.0	13.0	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup>Earnings; <sup>b</sup>income; <sup>c</sup>wealth; <sup>d</sup>labor; <sup>e</sup>capital; <sup>f</sup>business; <sup>g</sup>transfers; <sup>h</sup>other; <sup>i</sup>percentage number of households per group; <sup>j</sup>average number of persons per primary economic unit.

Table B3  
Employment status partition

Occupation	Averages			Income sources (%)					Gini indexes			Coeff. of var.				
	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	H(%) <sup>i</sup>	Size <sup>j</sup>
1989																
Workers	70.1	78.2	207.1	87.1	4.7	3.1	2.8	2.4	.42	.42	.73	1.1	1.76	4.78	57	3.01
Self-employed	118.8	169.8	1201.2	42.7	21.7	32.3	2.7	.6	.66	.69	.77	6.18	5.81	4.04	11.1	2.93
Retired	11.6	51.9	434.9	15.3	28	8.4	43.2	5.1	.88	.53	.69	3.72	2.41	2.69	17.4	1.84
Nonworkers	12.5	26.4	102.9	42.7	9	5.4	37.5	5.4	.88	.56	.85	3.4	2.24	4.84	14.5	2.54
Disabled nonworkers	9.9	24.6	90.8	39.1	.8	1.1	56.2	2.7	.86	.49	.81	2.47	1.11	2.66	5.5	2.36
Total	57	76.4	342.3	65.4	11.9	11	9.3	2.4	.61	.55	.79	4.47	4.61	5.51	100	2.73
2001																
Occupation	E	Y	W	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	H(%) <sup>i</sup>	Size <sup>j</sup>
Workers	81.1	93.1	299.2	84.4	9.2	3.1	2.5	.8	.46	.49	.76	1.82	3.13	4.28	60.9	2.79
Self-employed	153.8	189.2	1639.6	51.7	9.9	34.3	3.5	.6	.65	.64	.76	2.93	3.4	3.74	11.7	2.8
Retired	15	56.1	721.9	18.4	23.7	9.6	45.2	3	.92	.57	.74	9.39	3.81	4.38	18	1.73
Nonworkers	25.5	38.2	193.2	60.4	7.6	7.4	20.7	3.9	.81	.63	.89	5.06	4.36	6.14	9.5	2.41
Disabled nonworkers	17.5	29.9	103.8	56.3	2.8	2.7	37.2	1	.9	.61	.89	5.23	3.19	5.39	4.3	2.2
Total	72.5	92.5	522	68.5	10.9	11.4	8.1	1.1	.62	.57	.81	2.88	3.63	5.25	100	2.57
2013																
Workers	78.3	87.1	314.5	86.9	3.1	3.3	5.1	1.6	.51	.49	.82	2.52	2.7	5.3	56.9	2.82
Self-employed	146.1	208.4	2121	31.7	17.6	43.3	6.2	1.1	.71	.7	.81	3.83	4.36	4.61	9.7	2.79
Retired	13.3	58.6	613.4	17.8	14.3	5.5	58.6	3.7	.92	.54	.76	6.23	4.92	4.75	20.8	1.84
Nonworkers	19.6	35.5	131.7	51.5	2.3	4.1	31.6	10.5	.78	.51	.95	2.1	1.4	5.8	12.6	2.51
Disabled nonworkers	9.3	26.5	104.2	33.3	.7	2.2	58.1	5.7	.87	.44	.96	2.6	1.1	8.3	5.6	2.1
Total	63.9	86.4	528.2	62.5	8	13	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup>Earnings; <sup>b</sup>income; <sup>c</sup>wealth; <sup>d</sup>labor; <sup>e</sup>capital; <sup>f</sup>business; <sup>g</sup>transfers; <sup>h</sup>other; <sup>i</sup>percentage number of households per group; <sup>j</sup>average number of persons per primary economic unit.

2013 Update on U.S. Earnings, Income, and Wealth Distributional Facts

Kuhn and Ríos-Rull

Table B4  
Marital status partition

Marital Status	Averages			Income sources (%)					Gini indexes			Coeff. of var.				
	<i>E</i>	<i>Y</i>	<i>W</i>	<i>L</i> <sup>d</sup>	<i>K</i> <sup>e</sup>	<i>B</i> <sup>f</sup>	<i>Z</i> <sup>g</sup>	<i>O</i> <sup>h</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>E</i> <sup>a</sup>	<i>Y</i> <sup>b</sup>	<i>W</i> <sup>c</sup>	<i>H</i> (%) <sup>i</sup>	<i>Size</i> <sup>j</sup>
1989																
Married	76.8	97.9	472.2	69.6	11.4	10.5	7.7	.7	.53	.49	.75	4.23	4.22	5.07	58.2	3.39
Single	29.5	46.4	161.4	52.9	13.2	12.5	13.9	7.4	.69	.58	.82	2.94	5.15	4.34	41.8	1.81
Single w/dependents	31.8	43.4	127.1	59.9	4.2	15.7	11.1	9.1	.64	.54	.85	2.96	2.97	4.74	17.6	2.92
Male	49	58.8	255.9	68.9	7.7	16.9	5.4	1	.58	.55	.86	1.64	1.84	4.08	4.1	2.62
Female	26.4	38.6	87.2	55.7	2.6	15.1	13.7	12.9	.65	.53	.82	3.67	3.49	4.15	13.4	3.02
Single w/o	27.9	48.6	186.3	48.5	19	10.5	15.8	6.3	.72	.6	.8	2.92	6.04	4.1	24.3	1
Single males w/o	42.1	65.6	215.3	53.7	23	12.4	9	1.9	.67	.64	.85	2.81	6.86	5.08	9.5	1
Single females w/o	18.7	37.6	167.5	42.5	14.4	8.4	23.4	11.2	.73	.54	.75	2.17	2.79	2.56	14.7	1
Retired widows (females)	3.1	28.9	231.5	.9	26.9	11.7	58.1	2.3	.96	.46	.64	8.53	1.52	1.64	3.7	1
Total	57	76.4	342.3	65.4	11.9	11	9.3	2.4	.61	.55	.79	4.47	4.61	5.51	100	2.73
2001																
Married	99	121.8	709	70.5	9.4	12.5	6.8	.8	.57	.53	.78	2.61	3.15	4.72	60.3	3.11
Single	32.1	48	237.7	60.7	16.6	7.3	13.2	2.2	.61	.54	.82	2.31	4.98	5.63	39.7	1.73
Single w/dependents	32.1	39.7	151.3	74.9	4.7	7	8.9	4.5	.52	.46	.84	2.06	2.11	5.67	15.9	2.83
Male	45.3	55.5	282.4	70.4	7.4	13.1	7.9	1.3	.56	.53	.83	2.81	2.94	5.65	3.7	2.49
Female	28.2	34.9	111.8	77.1	3.4	4.1	9.3	6	.49	.42	.84	.98	.91	3.84	12.2	2.94
Single w/o	32.1	53.5	295.4	53.6	22.5	7.4	15.4	1	.66	.57	.8	2.46	5.62	5.34	23.8	1
Single males w/o	44.5	75.7	358.3	52.5	29.5	7.3	10.3	.4	.61	.61	.83	2.36	6.05	5.65	9.9	1
Single females w/o	23.3	37.7	250.3	55.3	12.4	7.6	22.7	1.9	.69	.49	.78	2.2	1.84	4.61	13.9	1
Retired widows (females)	1.8	23.1	242.2	4	23.5	4.4	65.9	2.2	.95	.43	.67	4.73	1.31	2.25	3.8	1
Total	72.5	92.5	522	68.5	10.9	11.4	8.1	1.1	.62	.57	.81	2.88	3.63	5.25	100	2.57
2013																
Married	90.9	119.1	751.9	64.3	8.8	13.5	11.6	1.8	.6	.54	.82	3.16	3.78	5.8	57.2	3.19
Single	27.9	42.8	229.8	55.5	5.2	11.1	24.3	3.9	.7	.51	.87	4.74	4.14	9.43	42.8	1.76
Single w/dependents	26.8	38.6	131.5	58.6	3.9	12.2	19.8	5.5	.64	.48	.92	2.71	2.63	7.08	17.5	2.86
Male	37	47.7	205	53.1	3.4	27.7	12.8	3.1	.71	.59	.91	3.33	3.08	7.2	4.6	2.58
Female	23.1	35.3	105.5	61.2	4.2	4.8	23.2	6.6	.6	.43	.92	1.79	2.24	5.99	12.9	2.96
Single w/o	28.8	45.7	297.8	53.8	5.9	10.4	26.9	3	.73	.52	.84	5.61	4.69	9.1	25.3	1
Single males	39.5	56	371.2	58	6.8	14.2	19.2	1.8	.72	.57	.89	6.15	5.76	10.86	10.6	1
Single females w/o	21	38.2	244.8	49.3	5	6.4	35.1	4.2	.73	.46	.78	2.12	1.59	3.84	14.7	1
Retired widows (females)	1.2	26.8	265.5	1.5	7.1	3.2	86.4	1.8	1.01	.38	.66	19.4	1.64	2.11	3.8	1
Total	63.9	86.4	528.2	62.5	8	13	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup> Earnings; <sup>b</sup> income; <sup>c</sup> wealth; <sup>d</sup> labor; <sup>e</sup> capital; <sup>f</sup> business; <sup>g</sup> transfers; <sup>h</sup> other; <sup>i</sup> percentage number of households per group; <sup>j</sup> average number of persons per primary economic unit.

### Detailed Results on the Effects of the Great Recession: Changes between 2007 and 2013

This section provides detailed results on the effects of the Great Recession on the age (Table B5), education (Table B6), employment status (Table B7), and marital status partitions (Table B8).

Table B5  
Age partition

Age	Averages			Income sources (%)					Gini indexes			Coeff. of var.			H(%) <sup>i</sup>	Size <sup>j</sup>
	E	Y	W	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>		
2007																
-25	29.1	31.6	50	88.9	.5	3.6	3.4	3.6	.44	.39	1.12	.84	.75	12.13	6.7	2.46
26-30	58.7	61.3	136.2	91.8	.9	4.5	1.4	1.4	.42	.39	.88	.82	.78	5.38	7.7	2.8
31-35	75	79.5	176.2	85.9	1.1	9.7	2	1.2	.45	.43	.78	1.67	1.7	3.93	8.9	3.31
36-40	84.3	93	315.4	82.2	4.5	9.8	2	1.5	.47	.46	.76	2.5	3.91	5.26	9.4	3.43
41-45	87.1	99.9	452.5	73.3	6.4	16.1	2.9	1.3	.53	.53	.79	2.24	3.11	6.69	10.5	3.11
46-50	101.8	114.1	671	77.4	5.6	13.7	2.1	1.2	.53	.54	.77	2.48	3.55	4.93	11.2	2.89
51-55	111.8	134.6	898.5	69.2	10.8	16	2.9	1	.61	.61	.79	2.9	3.5	4.57	10.3	2.52
56-60	106.2	133.7	1043.8	66.1	10.7	15.5	6.9	.8	.63	.6	.76	3.21	3.84	4.54	8.2	2.15
61-65	75.6	119.3	1172.8	47.6	15.5	18.3	17.4	1.3	.75	.64	.79	6.08	6.36	4.61	7.5	2.03
66+	21.3	72.5	908.4	15.7	25.8	15.9	41.9	.7	.91	.64	.78	11.96	5.68	5.92	19.6	1.66
Total	71.7	93.9	625.2	64.3	10.2	13.9	10.3	1.2	.64	.57	.82	3.6	4.32	6.01	100	2.56
2010																
-25	24.5	28.5	24.7	82.5	.3	3.7	5.9	7.7	.49	.41	1.19	.93	.78	7.01	6.2	2.32
26-30	49.2	52.7	51.8	88.8	.5	4.8	4.7	1.2	.42	.37	.91	.82	.73	14.11	7.5	2.62
31-35	70.5	74.2	122.4	88.8	.7	6.6	3	1	.48	.45	.96	1.5	1.49	6.64	9	3.28
36-40	74	80.8	184.7	84.4	1.9	7.7	3.6	2.4	.51	.48	.85	2.21	2.18	7.54	8.9	3.48
41-45	88.5	96.1	329.3	79.7	2.6	13.2	2.6	1.9	.53	.52	.84	2.63	3.73	5.42	9.9	3.26
46-50	99.1	106.6	626.6	75.6	1.7	18.6	3.2	.9	.57	.56	.84	2.73	2.96	6.4	10.3	3.03
51-55	98.7	115	649.9	73.9	6.2	12.7	5.2	2	.6	.57	.79	3.23	3.27	4.3	10.7	2.57
56-60	93.1	111.4	923.9	65.4	5.4	19.5	8.4	1.4	.66	.6	.82	2.92	2.94	4.89	9.2	2.29
61-65	78.1	107.5	1035.8	60.3	7.3	13.2	18.6	.6	.72	.6	.78	3.97	5.04	4.9	7.5	2.08
66+	21.7	63.6	803.3	22.1	11.2	12.8	52.8	1	.9	.54	.77	7.1	3.34	5.66	20.9	1.78
Total	66.6	84	530	67.2	4.8	13	13.5	1.5	.65	.55	.85	3.26	3.45	6.35	100	2.59
2013																
-25	22.4	26.3	26.7	84	.4	1.5	4.3	9.9	.52	.41	1.31	1.06	.86	13.15	6.2	2.4
26-30	45	49	67.3	87.8	.4	4.6	4.1	3.1	.44	.39	1.03	.89	.82	6.21	7.4	2.72
31-35	66.3	71.3	132.5	86.8	2	6.9	2.6	1.7	.45	.42	.88	1.1	1.13	4.8	8.8	3.23
36-40	86.4	95.7	289.1	81	2.9	10.5	2.9	2.7	.56	.53	.86	2.97	3.54	10.2	8.4	3.59
41-45	100.2	109.1	432.3	73.3	2.5	20.8	2.2	1.1	.57	.56	.87	2.69	2.88	5.21	9.1	3.31
46-50	85.7	99.9	474.1	74.8	6.6	12.4	4.1	2.1	.54	.53	.83	1.89	2.38	6.8	9.5	2.99
51-55	97.2	112.6	665.5	74	5.1	13.9	5.5	1.6	.63	.6	.83	4.31	4.26	8.1	10.1	2.63
56-60	84	108	744.6	64.2	9.3	15.4	9	2.2	.63	.6	.8	3.5	4.87	4.62	9.8	2.22
61-65	65.5	108	892.1	47.5	15.7	14.9	18.6	3.3	.71	.61	.82	4.14	5.39	5.09	8.8	2.1
66+	23	72.8	831.3	21.1	16.4	11.8	48.6	2.2	.91	.61	.79	7.69	4.69	5.57	22	1.77
Total	63.9	86.4	528.2	62.5	8	13	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup>Earnings; <sup>b</sup>income; <sup>c</sup>wealth; <sup>d</sup>labor; <sup>e</sup>capital; <sup>f</sup>business; <sup>g</sup>transfers; <sup>h</sup>other; <sup>i</sup>percentage number of households per group; <sup>j</sup>average number of persons per primary economic unit.

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Table B6  
Education partition

Education	Averages			Income sources (%)					Gini indexes			Coeff. of var.				
	E	Y	W	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	H(%) <sup>i</sup>	Size <sup>j</sup>
2007																
Dropouts	23.1	35.1	160.4	57.1	3.0	9.8	27.9	2.1	.66	.45	.78	1.86	1.47	4.31	13.5	2.69
High school	43.9	57.0	282.7	66.1	4.3	12.7	15.4	1.5	.59	.45	.74	3.84	3.89	5.11	32.9	2.6
Some college	57.3	76.1	412.2	64.9	9.8	11.9	11.5	1.9	.56	.5	.81	5.3	5.85	7.08	18.4	2.45
College	100.3	124.2	912.5	69.8	9.7	12.7	6.9	0.9	.55	.52	.78	2.3	3.18	5.0	23.9	2.58
Postgraduate	173.0	235.3	1910.8	58.0	16.5	18	6.8	0.7	.62	.6	.75	2.75	3.35	3.97	11.3	2.45
Total	71.7	93.9	625.2	64.3	10.2	13.9	10.3	1.2	.64	.57	.82	3.6	4.32	6.01	100	2.56
2010																
Dropouts	24.7	36.2	118.5	62.3	1.9	6.4	28.0	1.4	.72	.47	.83	5.75	4.09	6.53	12.0	2.78
High school	38.1	51.7	231.8	64.9	1.7	9.4	22.4	1.5	.58	.42	.79	1.98	1.68	6.84	32.2	2.56
Some college	49.7	62.7	291.6	68.9	2.5	11.2	15.4	2.1	.55	.45	.84	2.21	2.23	6.48	18.6	2.59
College	86.0	103.5	690.7	72.2	4.2	11.7	10.3	1.6	.58	.50	.80	2.33	2.53	4.99	25.8	2.51
Postgraduate	173.8	214.5	1816.7	63.5	9.0	18.7	7.5	1.2	.62	.57	.76	2.86	3.22	4.12	11.5	2.64
Total	66.6	84.0	530.0	67.2	4.8	13.0	13.5	1.5	.65	.55	.85	3.26	3.45	6.35	100	2.59
2013																
Dropouts	18.5	29.8	107.7	58	1.5	4.6	33.7	2.3	.68	.40	.80	1.89	1.28	11.75	11	2.81
High school	36.4	50.5	199.7	65.3	2.5	7.7	22.7	1.8	.60	.43	.79	1.67	1.83	6.69	31.3	2.57
Some college	44.0	60.9	318.1	62.8	3.3	10.6	18.9	4.3	.61	.49	.86	2.11	2.21	6.86	18.9	2.48
College	88.1	114.8	714.9	63.8	9.9	14.5	9.4	2.3	.60	.55	.82	3.05	4.26	6.23	26.3	2.53
Postgraduate	152.0	205.1	1647.6	59.4	12.1	16.5	10.2	1.7	.63	.58	.77	3.33	3.35	4.16	12.5	2.63
Total	63.9	86.4	528.2	62.5	8.0	13	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup>Earnings; <sup>b</sup>income; <sup>c</sup>wealth; <sup>d</sup>labor; <sup>e</sup>capital; <sup>f</sup>business; <sup>g</sup>transfers; <sup>h</sup>other; <sup>i</sup>percentage number of households per group; <sup>j</sup>average number of persons per primary economic unit.

Table B7  
Employment status partition

Occupation	Averages			Income sources (%)					Gini indexes			Coeff. of var.				
	E	Y	W	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	H(%) <sup>i</sup>	Size <sup>j</sup>
2007																
Workers	83.9	93.5	395	86.9	5.3	3.3	3.5	1.1	.47	.48	.78	2.55	3.44	5.41	59.9	2.82
Self-employed	152.9	209.7	2196.1	34.1	16.8	44.9	3.4	.7	.67	.67	.78	3.62	4.13	4.15	10.5	2.84
Retired	18.1	65.7	763.8	19.4	22.9	9.3	47.1	1.3	.95	.61	.74	8.95	5.05	4.55	18.7	1.7
Nonworkers	18.5	33	146.9	51	4.2	6	33.4	5.5	.79	.53	.86	4.19	2.93	7.02	10.9	2.36
Disabled nonworkers	9.8	26.6	111.6	32.9	2.7	4.5	55.3	4.6	.85	.47	.81	2.36	1.02	2.12	5.5	2.28
Total	71.7	93.9	625.2	64.3	10.2	13.9	10.3	1.2	.64	.57	.82	3.6	4.32	6.01	100	2.56
2010																
Workers	82.9	90.7	318.4	88.1	2.9	3.5	4.5	.9	.51	.49	.84	2.4	2.9	5.73	56.9	2.85
Self-employed	128.1	157.2	1841.8	38.1	7.5	46.5	6.3	1.6	.69	.66	.81	3.45	3.82	4.43	11.4	2.74
Retired	11.7	53.2	639.1	16.6	10.6	5.8	64.5	2.5	.91	.47	.73	4.63	1.96	4.45	18.9	1.77
Nonworkers	20.4	34	142.6	56	2	4.1	32.1	5.8	.75	.48	.89	2.75	1.79	4.82	12.8	2.5
Disabled nonworkers	10.2	26.9	95.9	35.3	.9	2.7	56.8	4.4	.85	.42	.84	2.34	.95	2.54	5.6	2.18
Total	66.6	84	530	67.2	4.8	13	13.5	1.5	.65	.55	.85	3.26	3.45	6.35	100	2.59
2013																
Workers	78.3	87.1	314.5	86.9	3.1	3.3	5.1	1.6	.51	.49	.82	2.52	2.7	5.3	56.9	2.82
Self-employed	146.1	208.4	2121	31.7	17.6	43.3	6.2	1.1	.71	.7	.81	3.83	4.36	4.61	9.7	2.79
Retired	13.3	58.6	613.4	17.8	14.3	5.5	58.6	3.7	.92	.54	.76	6.23	4.92	4.75	20.8	1.84
Nonworkers	19.6	35.5	131.7	51.5	2.3	4.1	31.6	10.5	.78	.51	.95	2.12	1.42	5.76	12.6	2.51
Disabled nonworkers	9.3	26.5	104.2	33.3	.7	2.2	58.1	5.7	.87	.44	.96	2.57	1.05	8.29	5.6	2.1
Total	63.9	86.4	528.2	62.5	8	13	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup>Earnings; <sup>b</sup>income; <sup>c</sup>wealth; <sup>d</sup>labor; <sup>e</sup>capital; <sup>f</sup>business; <sup>g</sup>transfers; <sup>h</sup>other; <sup>i</sup>percentage number of households per group; <sup>j</sup>average number of persons per primary economic unit.

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Table B8  
Marital status partition

Marital status	Averages			Income sources (%)					Gini indexes			Coeff. of var.			H(%) <sup>i</sup>	Size <sup>j</sup>
	E	Y	W	L <sup>d</sup>	K <sup>e</sup>	B <sup>f</sup>	Z <sup>g</sup>	O <sup>h</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>	E <sup>a</sup>	Y <sup>b</sup>	W <sup>c</sup>		
2007																
Married	99.5	126.8	854.3	65.5	10.9	15	7.9	.7	.58	.55	.8	3.12	3.89	5.5	58.8	3.15
Single	31.9	46.7	297.8	59.8	7.8	9.7	19.8	2.9	.65	.5	.8	4.6	4.61	5.38	41.2	1.72
Single w/dependents	33.9	44.4	192.6	67	2.7	10.8	14.6	4.9	.58	.47	.83	2.41	2.73	7.38	17	2.75
Male	43.5	54.3	240.4	70.2	2.4	11.6	13.4	2.5	.6	.5	.8	3.38	3.72	8.64	4.3	2.48
Female	30.6	41	176.3	65.5	2.8	10.5	15.2	6	.56	.44	.84	1.27	1.84	6.32	12.7	2.84
Single w/o	30.5	48.4	371.8	55.3	11.1	9	23.1	1.5	.7	.52	.78	5.86	5.42	4.61	24.2	1
Single males w/o	44.2	63.2	435.5	60.9	14.5	10.6	13	1.1	.65	.54	.81	6.16	6.38	5.39	9.7	1
Single females w/o	21.4	38.5	329.2	49.1	7.3	7.3	34.3	2	.73	.47	.75	2.73	2	3.35	14.5	1
Retired widows (females)	1.4	27.5	393.7	1.2	13.1	4.7	78.4	2.7	1.03	.41	.67	19.14	1.71	2.63	4.5	1
Total	71.7	93.9	625.2	64.3	10.2	13.9	10.3	1.2	.64	.57	.82	3.6	4.32	6.01	100	2.56
2010																
Married	93.3	112.9	741.9	69.5	5	14.1	10.7	.6	.6	.53	.82	2.65	3.02	5.69	58.1	3.2
Single	29.6	43.9	236.4	59	4	8.9	23.4	4.7	.66	.47	.85	5.36	4.37	6.23	41.9	1.74
Single w/dependents	29.3	40.3	152.7	65.1	1.6	8.2	18.3	6.9	.59	.44	.91	6.78	5.81	5.49	16.8	2.85
Male	41.1	50.2	197	67.6	1.2	15.3	13.9	2	.61	.51	.89	9.47	9.15	7.05	4.3	2.55
Female	25.3	36.9	137.4	63.9	1.7	4.8	20.4	9.1	.56	.4	.92	1.16	.89	3.85	12.5	2.96
Single w/o	29.7	46.3	292.3	55.4	5.4	9.4	26.3	3.4	.7	.49	.82	4.18	3.4	6.06	25.1	1
Single males w/o	38.6	54.8	323.3	61.3	5.3	9.8	20.4	3.2	.68	.52	.85	4.66	4.15	7.56	11.1	1
Single females w/o	22.7	39.6	267.7	49	5.5	9	32.9	3.7	.71	.46	.8	1.91	1.49	3.52	14	1
Retired widows (females)	1.3	30	360.5	.5	7.7	4.1	85.1	2.6	1	.4	.69	12.05	1.22	2.03	3.6	1
Total	66.6	84	530	67.2	4.8	13	13.5	1.5	.65	.55	.85	3.26	3.45	6.35	100	2.59
2013																
Married	90.9	119.1	751.9	64.3	8.8	13.5	11.6	1.8	.6	.54	.82	3.16	3.78	5.8	57.2	3.19
Single	27.9	42.8	229.8	55.5	5.2	11.1	24.3	3.9	.7	.51	.87	4.74	4.14	9.43	42.8	1.76
Single w/dependents	26.8	38.6	131.5	58.6	3.9	12.2	19.8	5.5	.64	.48	.92	2.71	2.63	7.08	17.5	2.86
Male	37	47.7	205	53.1	3.4	27.7	12.8	3.1	.71	.59	.91	3.33	3.08	7.2	4.6	2.58
Female	23.1	35.3	105.5	61.2	4.2	4.8	23.2	6.6	.6	.43	.92	1.79	2.24	5.99	12.9	2.96
Single w/o	28.8	45.7	297.8	53.8	5.9	10.4	26.9	3	.73	.52	.84	5.61	4.69	9.1	25.3	1
Single males	39.5	56	371.2	58	6.8	14.2	19.2	1.8	.72	.57	.89	6.15	5.76	10.86	10.6	1
Single females w/o	21	38.2	244.8	49.3	5	6.4	35.1	4.2	.73	.46	.78	2.12	1.59	3.84	14.7	1
Retired widows (females)	1.2	26.8	265.5	1.5	7.1	3.2	86.4	1.8	1.01	.38	.66	19.4	1.64	2.11	3.8	1
Total	63.9	86.4	528.2	62.5	8	13	14.3	2.3	.67	.58	.85	3.69	4.19	6.81	100	2.58

Notes: <sup>a</sup>Earnings; <sup>b</sup>income; <sup>c</sup>wealth; <sup>d</sup>labor; <sup>e</sup>capital; <sup>f</sup>business; <sup>g</sup>transfers; <sup>h</sup>other; <sup>i</sup>percentage number of households per group; <sup>j</sup>average number of persons per primary economic unit.

## Notes

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1. Most of the tables in this article, as well as additional tables for other years, can be found at Moritz Kuhn, “U.S. Earnings, Income, and Wealth Distribution,” <https://sites.google.com/site/kuhnecon/home/us-inequality>.

2. The main change relative to earlier articles is the sorting of households along the earnings dimension. We explain this change in detail later.

3. As is well known, much debate has ensued about the extent to which using the CPI does a good job of allowing for a comparison between dollars of different years. For example, the Boskin Commission (see Jorgenson et al. 1996) states that using the CPI overstates inflation by about 1.1 percent over approaches to measure inflation using more sophisticated methods. One such approach would be the chained consumer price index (C-CPI) constructed by the BLS. This index is only available from 1999 onward, so we still use the CPI-U-RS as the price deflator here. It is also the one most commonly used.

4. Social Security Administration, Average Wage Index (AWI), <http://www.ssa.gov/oact/cola/awidevelop.html>; Internal Revenue Service, Table 1—All Individual Income Tax Returns: Sources of Income and Tax Items, Tax Years 1913–2005, <http://www.irs.gov/pub/irs-soi/05in01an.xls>.

5. The exception occurs when the relevant variable can take negative values.

6. See Appendix A for technical definitions of these and all other italicized variables.

7. As discussed in the SCF documentation, the sum of income components and the total reported income need not coincide. Starting in 1995, the SCF uses the CAPI (computer-assisted personal interviewing) interview technology. The CAPI interview program tries to achieve internal consistency between the different survey answers by double-checking answers if respondents provide inconsistent answers throughout the interview. As a consequence, the sum of income components and reported total income yield almost identical results from 1995 onward. Before 1995, substantial differences can be found between the two income measures. For example, in 1992 the sum of income components exceeds total income by roughly 18.4 percent.

8. We provide further details in Appendix A.

9. The OECD equivalence scales assign a weight of 1 to the household head, 0.7 to each additional adult household member, and 0.5 to each child.

10. This approach differs from the approach in earlier reports in which households were sorted according to household identification numbers.

11. This number is based on NIPA data. NIPA reports a share of roughly 80 percent for wages and salaries in total compensation of employees. Employer cost of employee compensation as reported by the BLS (see, for example, Pierce 2010) includes paid leave, among other things, as an important component. In a household survey, paid leave would not change annual earnings but only the number of hours worked. In our discussion we therefore abstract from paid leave.

12. Other important components are paid leave and legally required benefits. See also note 11.

13. Financial assets are defined in Figure 7.

14. Both data series are taken from Robert J. Shiller’s “Stock Market Data Used in Irrational Exuberance,” [http://www.econ.yale.edu/~shiller/data/ie\\_data.xls](http://www.econ.yale.edu/~shiller/data/ie_data.xls).

15. Because a large fraction of households have zero earnings, we sorted households with equal earnings according to income.

16. Only one set of weights is designed for the 2009 data.

17. Note that the bottom three and top three groups overlap with the lowest and highest quintile in each of the matrices.

18. In the data, the earliest reported transfer is from 1902, and we use historical CPI-U data from “Consumer Price Index, 1913–,” <https://www.minneapolisfed.org/community/teaching-aids/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913>, to adjust for inflation.

19. We discuss trends of income and wealth concentration in the top of the distribution in the subsection entitled “Shares of the Rich and the Superrich.”

20. This might as well be a cohort rather than an age effect.

21. Note that singles without children do not necessarily live alone; the category of dependents excludes all persons that usually do not live in the household or are financially independent. Singles might also have been married or might have children but are living alone at the time of the interview.

22. We exclude households in which the head reports positive income but no hours worked or positive hours worked but no labor income.

23. Recall that we are not comparing the same households, because the sortings are specific to each variable.

24. Recently, Saez and Zucman (2014) propose a capitalization method to infer wealth positions from tax returns. Although they provide a sophisticated approach to transform observed income flows in wealth stocks, in many instances their method still has to rely on information of the wealth distribution in which they refer to the SCF data.

25. There is some information on wealth based on estate taxation, but it affects only the small group that dies and is wealthy enough to have to pay taxes.

26. Note that Table 47 underrepresents the education premium of the rich because they are older and young people are more educated than the old.

27. The absolute value of the Gini is not affected by transforming debt values into negative numbers and can be interpreted as usual.

28. Nonresidential real estate is a net position in the sense that mortgages have been subtracted. It contains real estate other than the principal residence of the family, time shares, vacation homes, or business and commercial property.

29. Note that in our definition of wealth, we have not included the present value of pension plans not accumulated in accounts.

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